



ECHO IRELAND

Journal of the
Irish Radio Transmitters Society

December 2010



**IRTS
80m
Counties Contest**

**January 3rd
2011**

1400 - 1700

*Seasons Greetings
and best wishes to all for 2011
from the
Officers and Committee
of the IRTS*



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News Bulletins and Readers

Sunday				
Dublin	1100	7.055	SSB	Sean EI7CD, Roland EI4GYB, Ger EI4GXB Francis EI5GOB
Wicklow	1130	3.680	SSB	(as Gaeilge) Paddy EI7GK, Danny EI6GS
Dublin	1145	145.525	FM	Tony EI5EM, John EI7JG, Frank EI6EF, Liam EI3HK
Dublin	1200	3.650	SSB	As 1100
Mayo	2000	145.600 - 433.450 -		70.375 - 50.450
			FM	John EI7IQ, Padraic EI9JA, Jimmy EI2GCB
Tipperary	2030	145.450	FM	Tommy EI2IT, John EI2JB, Andy EI5JF
Monday				
Cork	2000	145.750	FM	Vincent EI7HN
Limerick	2000	145.725	FM	Brian EI9AL, Simon EI7ALB, Gerry EI3JU, Ger EI4GXB
Louth	2000	145.675		Peter EI4HX, Thos EI2JD
Tuesday				
Waterford	2130	145.650	FM	Francis EI5GOB

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When is my membership due for renewal?

Your membership renewal date is shown on the wrapper in which the newsletter is posted – above the name and address. For those who receive Echo Ireland by electronic distribution, the renewal date is included in the email alert sent when a new issue is published. Members who pay by direct debit will see “(DD)” after the renewal date.

Use **www.irts.ie/renew** to renew your membership at any time; you can also renew at a Rally, or by sending your annual subscription directly to the IRTS Treasurer.

Please renew early to keep our postage and other costs down. Membership is extended by 12 months from the normal renewal date whenever a payment is received.

Joe Ryan, Membership Records Officer
memrecords@irts.ie

A Message from IRTS President Paul Martin EI2CA

Christmas draws close and as I write these words the forecast is for snow and freezing winds for the next few days. At least we can look forward to some good low band conditions and we hope a small rise in the sunspot numbers for next year.

Our Society has had another very successful year and the Committee are already planning the activities for our 80th celebrations, the year after next, in 2012.

I would like to thank all those who have worked so hard during the past twelve months to provide services to all our members and to encourage them to continue despite all the increased demands on their time given the present economic difficulties.

We are always in need of volunteers and if you feel you can spare some time please contact any member of the Committee.

To the many new licensees who have joined us on the bands during the year, you are most welcome.

I have been impressed by the quality of

your operating skills and I encourage you to learn from the more experienced operators, they are always willing to share their knowledge. That extra piece of skill you pick up from listening to the experienced DXer will catch that rare station you have been chasing for months.

EIs have always enjoyed a reputation as skilful and considerate operators. All Irish operators benefit from this respect and it is the duty of us all to ensure that we do nothing to sully that reputation. So enjoy your time on the bands and follow the Amateur Code of showing consideration and respect to other operators.

I hope to hear you all enjoying yourself in the 80m Counties Contest next month.

This is a QSO party as much as a contest, so even if you are not a contester, do come on and enjoy what has become a really great gathering of EI and GI stations.

The contest is on the Bank Holiday, Monday the 3rd.

Finally, I hope the guy in the red suit brings you something cool for the shack



and that he takes care not to scatter snow all over the rig.

And as for you Rudolf, last year you bent an element on by 80m Yagi, any chance you could straighten it this year while you are waiting on the boss?

Have a Happy and a Holy Christmas, and a great 2011.

Paul EI2CA

Fintan Murphy EI8C RIP - A memory

We regret to announce the unexpected death of Fintan Murphy EI8C on November 28th last. We extend our deepest sympathies to his family.

Recollections by EI4DIB

I met Fintan Murphy (EI8C) back when I was still a SWL, he had a small shop on one of the back streets in Drogheda, The shop was an electrical repair shop for all small household appliances.

Whenever I was passing I would drop in to see what he would be working on, often he would have something apart on his counter doing repairs, a radio etc.

He would show me the electrical parts and explained what they were, resistors, capacitors, coils etc....

He had his IRTS certificate proudly hanging on the wall with some of his QSL cards, he was always full of chat about working different countries on the HF bands, mostly on CW.

Fintan was very instrumental in pointing me towards the Amateur Radio hobby, with all his interesting tales of QSO's on the bands.

He used to give me measurements of antennas and indeed the parts to make some of them, all for HF of course....

After he moved from the shop he opened another workshop in another part of Drogheda, this was at the bottom of his garden with the main door out on to the street for public access.

This door was always open and he was always keen to see somebody's head popping around the corner.

He was always more interested in people calling into the shops for a chat and pass the time.

In later years Fintan was not very active on the bands and always had hopes of coming back on, he asked many questions of his visitors about band conditions etc.

Where as I never had the opportunity of working Fintan on any band, I am proud to have known him personally through the years.

He will be missed by those who used to drop into him, may he rest in peace.

Tony Allen. EI4DIB.

Ham Square - for ham radio operators on the move

Amateur radio enthusiasts who also own an iPhone may find this new app from G7LEU quite useful - especially if they are constantly on the move.

Mark Turner G7LEU has developed an iPhone application that may be of interest.

The app, Ham Square, uses the iPhone's built-in GPS receiver to determine the current location, and then presents that location in decimal degrees and Maidenhead Locator, i.e. it shows the current "square".

The app is free, and available to iPhone users via the iTunes App Store as usual.

Please see <http://www.kramstuff.com/> for more details and a screenshot.

Echo Ireland Input

All input for inclusion in Echo Ireland should be sent to:

Dave Moore EI4BZ, Dooneen, Car-
rigtwohill, Co. Cork.
ei4bz@eircom.net 087-6290574



Charlie EI8JB, Dave EI7GEB and John EI6GHB

Zulu's Spotted in Cavan

On 10/10/10 the Amateur Portable Group EI0Z were active once again, this time on Mohercrom Hill in County Cavan, activating SOTA IE-054 and W.A.I. Cavan N79

Band conditions on the day were not great but after being spotted on the cluster by several stations the pile ups began with mainly European stations being contacted. Also in the mix was that rare entity EI. Our thanks to EI2GFB Declan in Monaghan, EI7JQ Pete also in Monaghan, EI3GIB Gary in Crossakiel and for the first time in our log the club call EI4CARA, to name a few.

Equipment used on the day was a Yaesu FT 897D with a 6m fishing pole antenna and a Kenwood TS 50 with a G5RV, both radios running 100w from batteries. Weather on the day was windy and cold but thankfully no rain.

A special word of thanks must go to all the UK stations,(too many to list) for calling in with words of encouragement and thanks for the SOTA activation, and enquiring about EI0Z's next activation, check us out on QRZ for that.

We plan one more activation before the end of 2010 (weather permitting) and it should be a good one, so keep watching the cluster !!!

To all the stations that supported us in 2010, thank you and happy Christmas. We look forward to many more QSO's in 2011.

Find your Locator and Worked All Ireland Squares

We have had some enquiries recently about peoples locator and WAI squares.

If you have access to the internet, then its very simple to get a very accurate result for both. The sites below all use Google Maps and you can zoom in on your QTH and just click and it displays the square.

For you Maidenhead Locator square, you can use either of the following two sites;

<http://f6fvy.free.fr/qthLocator/>

<http://www.g8bcg.org.uk/find-your-locator-map.html>

For your Worked All Ireland square use the following site;

<http://www.gridreference.ie/>

See the article in the August issue of Echo Ireland for a detailed explanation of the Worked All Ireland Award Scheme. If you need a copy of the article, send an email to the editor.

Theory Examination

The results of the theory examination for the Amateur Station Licence held on October 6th were issued within two weeks by ComReg.

Of the 14 candidates who sat the examination 9 passed.

Congratulations to those who passed and we hope to hear you all on the air soon.

The first of the successful candidates were heard using their new call signs on October 29th.

Since IRTS took over responsibility for setting, organising and correcting the theory examination in May 2005, twelve examinations have been held.

A total of 234 candidates have sat these examinations and 139 were successful in obtaining the Harmonised Amateur Radio Examination Certificate (HAREC).

The next theory examination will be held in early July 2011.

New amateur radio bands for Spain

The Spanish Amateur Radio Society URE has succeeded in gaining access to some new bands for Spanish radio amateurs.

Spanish Amateurs now have access to:

2320 - 2322MHz

5760 - 5762MHz

10368 - 10370MHz

Amateur use of these bands has been authorised for a year, however, those intending to use 2320-2322 must first inform the telecommunications regulator.

Spanish Amateur Radio Society URE in Google English

<http://www.tinyurl.com/SpainURE/>

Radio Prague to end shortwave transmissions

The following has been posted on Radio Prague's Facebook Page:

Radio Prague will be terminating shortwave broadcasting as of January 31st.

The station's financing for next year has been drastically reduced by the Foreign Ministry in line with government austerity measures aimed at cutting the state deficit. The details of the budget are still being discussed.

At present, broadcasting will continue in all six languages via the internet, satellite and partner stations.

IRTS Committee 2010/11

President Paul Martin EI2CA

V-President Seamus McCague EI8BP

Committee:

Pat Fitzpatrick EI2HX

Thos Caffrey EI2JD

Sean Donelan EI4GK

Ger McNamara EI4GXB

James Holohan EI4HH

Peter Grant EI4HX

Stephen Wright EI5DD

Brendan Minish EI6IZ

Sean Nolan EI7CD

Joe Ryan EI7GY

Ger Gervin EI8CC

Charlie Carolan EI8JB

Pat O'Connor EI9HX

South Dublin Radio Club



The picture shows some of the members of South Dublin Radio Club who have been successful in the HAREC exam this year. From left:

Martin Farnan EI9GCB, Fran Griffin EI9GQB, Michael Fitzgerald EI9GGB, Jim Hall EI9GLB, Dave Sholdice EI9GFB and Ronan Griffin EI9GPB

NZ Radio Hams multiplex four video and audio streams

The data compression, inherent in all forms of digital television, permits the simultaneous transmission of many video and audio streams in the bandwidth previously occupied by one analogue television transmission.

This technique is a feature of Broadcast digital television.

On Saturday, the 4th of December, 2010, a group of Wellington and Hutt Valley Radio Amateurs simultaneously multiplexed four video and audio streams into one digital television transmission, using low cost equipment.

The transmission was centred on 1282 MHz, in accordance with the NZART band plan (page 4-11 of the latest Call Book), and occupied 1274 to 1290 MHz, the same bandwidth as one analogue FM television transmission.

The DVB-S modulation format was used, receivable on an unmodified satellite TV set-top box.

Further development and testing is planned, with the aim of transmitting the four video and audio streams within an 8 MHz bandwidth, half that used by the above tests, using the DVB-T modulation format, receivable on an ordinary Digital Terrestrial television receiver.

The team was led by Doug, ZL2TAR, assisted by Gavin, ZL2TVM, Dick, ZL2TGQ and Phil, ZL2TIQ.

Memoirs of an Irish Radio Officer

Author Jack Lynch's new book "Beyond the Sea, Memoirs of an Irish Radio Officer" has recently been published. These memoirs record the life of a Cobh, Co. Cork boy born in 1927 from infancy to adulthood in the millennium.

Amongst the happy memories are the games and tricks played on each other and his schooling from the convent years to secondary college in Cobh.

It is an honest reflection of the heart-breaks and Jack now lives in Malahide. His book is available in all good bookshops

Secondary School Transition Year Project

The Society is in discussions with a number of parties with a view to a possible Transition Year Secondary school project based around one of the proposed educational satellites to be launched next year.

If any of our members are teaching at secondary level or have past experience of same, we would welcome their help in designing the content of the project or indeed carrying out a critique on the proposal. Please contact Paul EI2CA or any member of the committee.

RTE Switch on Digital Terrestrial Television

Communications Minister Eamon Ryan announced on October 29th that the RTE Digital Terrestrial Television service is available to 90% of the Irish population. The Digital Television service was launched from 24 sites around the country on a trial basis.

The announcement means that TV viewers will have 2 years to upgrade to digital in advance of switch off of the analogue terrestrial television network operated by RTÉNL.

This analogue switch off will take place at the end of 2012 in Ireland. Over 1 million viewers currently use the analogue terrestrial television service in their homes.

The channels on the trial service will initially include RTÉ One, RTÉ Two, TV3 and TG4.

More channels and radio services will be added to the channel line up as part of a national launch of the RTE operated Free-To-Air DTT service – SAORVIEW – which will take place next year.

SAORVIEW will be Ireland's first free-to-air national digital television service. In preparation for the full launch of SAORVIEW in the spring of next year,

RTÉNL will prepare the technical infrastructure and achieve full coverage for the population of Ireland.

For further information on SAORVIEW go to: www.rte.ie/saorview

Gov. press release.

Outgoing QSL Bureau

All outgoing cards should be sent directly to the Outgoing Bureau Manager:

**Tony Baldwin EI8JK
Rathlin,
Kilcrohane,
Co. Cork.**

ei8jk@amsat.org

Please do not mail cards to P.O. Box 462

If you advise Tony by email when you mail a packet of cards to him, he will acknowledge receipt by email.

Dundalk Amateur Radio Society. CQWW SSB 2010

It is great to report that the Dundalk ARS is going from strength to strength. Membership has been growing steadily over the past two years. This is helped by an active 2m Repeater (EI2CCR), an active Internet Gateway (EI2MOG), an up to date and evolving website www.ei7dar.com and our very own club house. We are kept up to date with international and national news by our four club members on the IRTS Committee, whose jobs include the Radio News Editor, the QSL Manager, the Awards Manager and the Contest Manager. Hosting the IRTS Dinner and AGM earlier this year also helped to promote the club locally and nationally.



Pat Fitzpatrick EI2HX

We have been active in the IRTS and international contests for many years. In recent years we have been using the call sign EI0W in the international contests and the club call sign EI7DAR in some of the IRTS Contests.

This year we decided to enter the CQWW SSB contest in the M/S (Multi/Single) section as a training weekend for the club members. It was decided to use the QTH in Clogherhead of our Chairman Thos EI2JD, who kindly opened his home for the 48 hours of the contest.

The object of the weekend was to get the new members, who may have never seen a contest in operation, down to the station to see how it all happens and indeed to eventually sit in the "hot seat" and make a few QSO's.

The equipment used was a TenTec Orion II with a Heil Microphone connected to an Acom 1000 Amp to bring us up to 400w and Win-Test logging programme.

The antennae used were a 3 element SteppIR for 10, 15 and 20m and a nest of inverted V's for 40, 80 and 160m.



Ark EI9KC and Thos EI2JD

Thos has advertised on QRZ.com that visiting contesters are welcome to participate in EI0W activities. International visitors have included OK1TN, OK1NU, LX1KC and DJ5MW as well as many EI & GI Hams. There is a new album on the club website with photos of many of the visiting hams. The trend continued this year when EI9KC Ark contacted the club and got an invitation to help out in the CQWW SSB contest. Ark arrived in Clogherhead a few hours before the contest started and was shown around the station.



Brendan EI1429 and Anthony EI2KC

Prior to the contest starting Thos set up the webcam and went "live" on the website.

The contest started at 0100 local (0000 GMT) with Thos EI2JD taking the first session with Ark EI9KC looking on. The bands, as expected, instantly became wall to wall noise. It soon became apparent that the 40m Inverted V was not doing the business and a note was made to erect one of the 40m verticals the next day. QSO's were made on 80m and 160m working a few mults and making a few small runs.

After a few hours Ark EI9KC took over and worked until just after 0700 while Thos grabbed a few hours sleep. After a cuppa and a daylight tour of the antennae, Ark headed off home after putting a few hundred QSO's in the log. Thos did a run on 20m until the first of the club members arrived at 1000.

The first of the crew arriving were Peter EI4HX and Charlie EI8JB followed shortly by Seamus GI4SZW and Tom EI9CJ. Charlie jumped into the hot seat from 1050 to 1110 and from 1150 to 1210 followed by Peter until 1310 and Tom covered the lunch time to 1330. In between times Thos jumped in to change bands when necessary.

10m, 15m and 20m were busy with nice openings to Europe. Everyone was delighted to see 10m open and were queuing up to use the radio. Even though we were entering the multi single section which allowed us to use a second radio to hunt multipliers only, it was decided to only use the one radio. This meant we could put all our efforts into manning the one radio and also we did not have to put up an extra tri-band antenna for the extra radio.

There was always someone sitting beside the operator listening and waiting his turn on the radio. While the shack was busy so was the kitchen, as the kettle was always on the boil and there were discussions aplenty about the club and future activities.

Seamus GI4SZW next hopped onto the hot seat and took a few minutes to acclimatise to the radio, the logging programme and the punishing rate that Thos expected from him. I guess he was saying EI0W over and over in his sleep that night, hi.

Jim 2I0SBI arrived shortly after lunch and both he and Tom EI9CJ were put to work with Thos putting up a ground plane vertical for 40m. The ropes and ground radials were all at hand and the vertical was standing and secure in about 10 minutes. A few minutes later and the eight radials were unwound and pinned to the ground, coax connected and hey presto one 40m vertical ready for use.

The afternoon was busy in the shack with the operators changing every half hour or so.

If we were holding a frequency and calling CQ the next op continued calling and working the pile-up. There was always someone keeping an eye on the DX cluster for the new/rare country. Activity on the beach broke the attention of the guests as the Clogherhead Lifeboat arrived back after a few hours out on exercise. Everyone was amazed with the proficiency of the crew in getting the vessel out of the water and onto its carriage. A lot of photos were taken and the activity provided a lot of discussion over another cuppa. About 1700 saw an exodus from the shack with the lads heading home to look after their weekend chores. Thos EI2JD utilised this time working South America on 15 and North America on 20m.

Pat EI2HX arrived out after 19:00 where he was put in to the hot seat to make a few QSO's. Well done Pat, we all know how hard that was!! After a short break and a big cup of tea both Thos and Pat kept EI0W active until midnight changing from 20 to 40 to 80 and ending up on 160m. The 40m ground plane erected earlier worked very well putting a lot of new DX mults into the log. Pat headed off home for the beauty sleep while Thos held a nice run on 160m until just after 0300.

The early morning crew arrived at 0600 banging windows and doors trying to get into the shack. Mickey 2I0MMT and Mickey 2I0EIB arrived with great enthusiasm and an apple tart. We searched the bands for a few new countries while explaining the workings of the shack and logging programme. 0700 saw the arrival of Anthony EI2KC who was able to stay until 1400 putting a few hundred more QSO's into the log. Brendan EI1429 from Ballinrobe in Mayo was visiting his folks for the weekend and gave a few hours of his time to EI0W on Sunday afternoon. Pat EI2HX and Jim 2I0SBI also arrived back again to give support for the afternoon.



Mickey 2I0MMT



Seamus GI4SZW with Brendan EI1429.

Early evening saw everyone heading off home leaving Thos to a quiet shack. As most of the weekend was used chasing DX (mults) and the ops getting used to the logging software Thos decided to go into "RUN" mode (calling CQ) for the remainder of the contest. He ended the contest with a good run on top band.

Many thanks to all who helped make it an enjoyable contest and weekend.



Mickey 2I0EIB

EI0W score in the CQWW SSB 2010 = 924,618

Band	QSO	Zone	DXCC	Points
160	243	9	53	267
80	180	12	51	224
40	205	13	61	258
20	455	23	77	633
15	312	26	69	558
10	126	12	32	171

Hope to have worked you all in the CQWW CW at the end of November.

We wish everybody a Merry Christmas and all the best for 2011.

73 de all at EI7DAR/EI0W



HF Happenings

with Dave Deane EI9FBB

Welcome to the Christmas edition of 'HF Happenings' thus putting closure to 2010, well almost! We still have a few little tidbits and loose ends to finish off before we can put 2010 to an official end.

For those of you who have been following this column over the past year may recall W1JR's End of year review which we published last season. We hope to be able to have this ready for print for the next edition with kind thanks to Joe, W1JR.

OK, recapping from the last issue, we had all 4 Caribbean/Dutch entities gracing all bands/modes over the past 2 month period as promised. These new editions were workable on all bands from 160m – 10m and many EI callsigns were noted across all the bands.

ARRL, are deliberately holding off on awarding DXCC credit for these operations until after 1st January 2011. In fact, the following is from Bill Moore, NCIL, DXCC manager with a little advise for LoTW users and these new PJ entities. 'You may submit all your QSOs with PJ stations to LoTW anytime. There is no need to hold them out of your log or do anything differently from what you already have been doing. You do not need to assign country names or identifiers. After we issue certificates to the PJ license holders, LoTW will make matches and assign the correct entities automatically'.

PJ2 – Curacao.

PJ2/OE3JAG, Karl, will be on the air January 30-February 11, 2011 from Curacao. He plans to be active on 40, 30, 20, 17 and 12m, mostly CW, holiday style. QSL: bureau, LoTW or direct to OE3JAG.

PJ6 - St. Eustatius & Saba.

Look for G4IUF, Mike, to be on Saba Island between January 27th and March 3rd of next year. He'll be operating probably as PJ6/G4IUF from "a rental villa with plenty of trees and room for antenna." This will be a holiday style operation on CW and SSB on 3.5 through 28 MHz.

He'll be using an IC-7000 and W3DZZ antenna. Listen for him around 7KHz up from the bottom of the band on CW and then on SSB on 3.797, 7.147, 14.157/247, 21.277, 28.477 MHz. QSL via G4IUF.

ZL8X – Kermadec Island.

Also recapping from the last issue, we had the announced ZL8X operation from Raoul Island which counts as Kermadec Islands towards ones DXCC.

This operation was indeed a huge success, and a 'hats off' to all concerned. The 14 man (13 men + 1 YL) team logged a staggering 148,750 QSOs in almost 18 days operating. When you work that out, it amasses to an astonishing daily count of 8,264 QSOs or over 344 QSOs an hour. Of those, there were 90 different EI QSOs with 43 different EI callsigns listed in their log, which is quite a remarkable result. They were workable from 160m through 15m and were heard on 12m even however, not worked. Congratulations all for working this difficult one. Their OQRS is now open so one can now request their Online QSL Request with a small donation.

CY0 – Sable Island.

Those who were waiting for the upcoming Sable Island DXpedition may be interested yet disheartened to hear the following. This is the official word from Randy N0TG, and just shows the dangers and hard-ships that can be endeavored in providing some DX for you to chase.

"Dear Clubs and Foundations who have generously supported the Sable Island Dxpediton:

Thank you for your support and the opportunity for us to work with you. Unfortunately, as perhaps you have heard, a problem with the special equipped aircraft in preparation for our flight has caused a delay for an unknown extended amount of time. It is expected that the delay is going to be extensive as the problem is a major safety related issue and the aircraft cannot fly.

Thus, due to the uncertainties of the delay and that a reschedule of the DXpedition, if possible to do so, would likely need to be next Sept/Oct. It is therefore very appropriate for us to refund the support you have provided, as well as, to individual supporters. I cannot express how disappointed we are in not being able to carry on with a definite plan. Perhaps we will try again in the future, but for now, it is impossible to project when or if it will be possible.

A description of the issue the best we understand is provided below:

A superficial dye-penetrant test indicated the presence of cracks.

Clearly the aircraft cannot fly in a condition in which there are visible cracks, but of unknown extent, in the axles. Therefore this aircraft is no longer airworthy and it is grounded indefinitely until the axle can be removed from the aircraft (no small job) and subjected to additional NDT testing to determine the extent of the cracking. Whether the aircraft can legally remain in service with some known amount of cracking is possible but highly unlikely. The aircraft owner will need to either develop a repair scheme (also highly unlikely), or they must find a replacement axle in new or certified reconditioned state, all of which parts require FAA documentation to validate them. Since the aircraft is of British design, there may be other airworthiness documentation considerations regarding part certification.

The aircraft the axles are on is a Britten-Normal Islander which has been out of production for decades. Finding a qualified major part for an aircraft of that age is so challenging a business that special companies exist solely to do that on behalf of aircraft owners. Our charter aircraft operator is being very honest with us. He has solid grounds for stating that he cannot put a date upon when our transportation will be airworthy again.

There are other aircraft of this type in Canada but no-one with both the necessary modified undercarriage for landing on beach sand and the willingness to use it on Sable. A replacement fixed-wing aircraft is therefore a non-option.

As of recent days Al Wilson - E1AWW/ CY0 is assigned as a worker on Sable Island. His schedule is 3 months ON and 3 Months OFF.

Currently he is on the Island and will be active as work schedules permits through December. This is a new development/ new ham and may help the "need". He is beginning to show up on the Spotting Clusters.

Thank you again; we will be refunding in

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the near future. Updated information will be posted on our web site as to final decisions related to any potential reschedule as details become available.
www.CY0dxpedition.com

T6PSE – Afghanistan.

Updating the T6PSE DXpedition planning, Afghanistan in May: "Due to security concerns, we are not going to announce the specific 10 days in May that we will be active, or our location in advance." A band and mode survey is on the webpage: <http://www.intrepid-dx.com/t6pse/survey.php>. The team is finalized, with 12 operators.

Almost the entire YI9PSE team is on board. Added are K7HC and WO1S. WO1S, John, "has extensive experience in Afghanistan going back to 1962. He has operated there recently as T6EE." Pilot stations are AA6G, N1DG and MM0NDX. Fund raising continues, the most significant costs being security and shipping. All gear must be shipped air cargo, competing for space with government entities and NGOs.

DX0DX – Spratly Island.

Just in time for inclusion in this issue is the latest press release from DX0DX about the upcoming Spratly Island operation.

The Spratlys DXpedition 6 January to 1 Feb 2011
VK3PC, Jim Linton, Public Affairs
DX0DX

A recent meeting chaired by the DX0DX DXpedition Team Leader, Chris Dimitrijevic VK3FY & DU8/VK3FY reviewed progress achieved so far with only 60 days to go until special DX entity The Spratlys (IOTA AS-051) hits the amateur bands.

The meeting was attended by the DX0DX Co-Leader and Webmaster Peter Dernikos VK3FGRC, Public Affairs Officer Jim Linton VK3PC, and team members Keith Proctor VK3FT, Lee Moyle VK3GK and Nik Dimitrijevic VK3FNIK.

It heard that the pre-assembly, erection and tuning of eight HF Yagi antennas in Fontana California went extremely well with the antennas tuned as per instructions to their allotted bands.

The antennas are three TW-33-XL 30-17-12m band 3-element tri-banders, three TA-33-M 20-15-10m 3-element tri-

banders, and two 4-element mono-banders for 20m.

Each was then partly disassembled breaking down into four parts for allow for quick installation once they reach the island. Masts, rotators, masts and cabling have all been finalised.

Other main equipment includes ten ICOM IC7600 transceivers (four each for CW and SSB, plus two on digital modes), an IC9100 (6m, 2m, 70cm & 23cm), eight generators with associated electromagnetic interference (EMI) filters, 11 laptop computers, four SteppIR Verticals, 1 x 2 element SteppIR Yagi, 2 x 80m 4sq's, 2 x 40m 4sq's, 6 x OM Power OM3500HF amplifiers, 3 x ACOM1000 amplifiers, 1 x OM Power OM2006 6m amplifier, 1 x ACOM 1010 Amplifier, 2 x Thamway amplifiers, 1 x Commander 144MHz Amplifier, headsets, foot switches and interfaces.

Chris VK3FY & DU8/VK3FY said, "Well done to the Station & Planning Coordinator David Collingham K3LP for organising and attending the Pre-Assembly Gathering and also DXpedition logistics coordinator Charles Spetnagel W6KK for his understanding in having all the equipment dispatched to his QTH and also being part of the Pre-Assembly Gathering."

Special thanks for their hands-on contribution in this important phase of the exercise goes to DX0DX Team Leader Chris Dimitrijevic VK3FY, Nik Dimitrijevic VK3FNIK, Arnie Shatz N6HC, Bob Grimmick N6OX, West Coast Pilot Milt Garb W6QE, Dennis Juniper N7DDU, Byron Hunsaker NF6T and Richard Briano, who all attended the Pre-Assembly and Container loading gathering in Fontana, California over the weekend of 30-31 October.

The Philippine Amateur Radio Association (PARA) has appointed DX0DX team member, Dindo Garcia DV1UD, as the PARA liaison person to handle all in coming equipment shipments, and liaise with the Bureau of Customs in respect of all equipment for the DXpedition.

Chris VK3FY & DU8/VK3FY said, "A new high tide photographic survey commissioned by the DXpedition has confirmed that the island's coastline and available beach has dramatically changed from what was previously known, due to rising sea levels and sea erosion.

"This has meant a change in some aspects of the location of antennas and operating camps, but being fully aware in advance has enabled David Collingham K3LP the Station Layout Coordinator and other DX0DX Team members to ensure it does not have a significant impact of the DXpedition plans."

The four operating camps will use handheld VHF/UHF transceivers, kindly provided by ICOM Amateur, for intercommunication.

The meeting also had its lighter moments in discussing the island's resident goats and whether they could take a liking to coax cable, and if a diet high in vitamin B12-rich Marmite might ward off mosquitoes.

In recent hours Chris VK3FY & DU8/VK3FY has been informed that the boat hired to transport the team and its supplies to Thitu Island is now in need of extensive repair following damage sustained in very rough weather.

"The official advice received is that it is doubtful repairs can be made before the team is due on the island. While this is a disappointment, with it occurring two months out from the DXpedition sufficient time remains to source a replacement vessel," he said.

The excitement continues about this major DXpedition that will see more than 37 radio amateurs from 15 Nations, who have made their individual substantial financial commitment to be part of the DX0DX operating team over the four weeks. As part of a humanitarian contribution, two doctors, Josette Docherty VK2FXGR and Edward Soriano 4F1OZ are also to provide medical checks to the island's residents.

In another development, Chris VK3FY & DU8/VK3FY said that the DXpedition is to be extended to accommodate the CQ World Wide 160m CW Contest. The Municipality of Kalayaan has agreed to the time extension.

He said, while DX0DX was to go QRT on 24 January, a couple of individual and keen members have asked if they could stay on air for that contest when ends at 2200 UTC Sunday 30 January. This will now extend DX0DX activation to 1 Feb 2011.

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"This limited extension was carefully considered and agreed in light of strong interest from Top Band contesters and the 160m band being the highest sought after in the DX0DX website online survey."

The generous corporate sponsorship that makes the DXpedition possible by providing equipment and other needs, plus funding support from DX groups, clubs, and individual radio amateurs which is still being received. All are gratefully acknowledged on the DX0DX website www.dx0dx.net.

FK – New Caledonia / FJ – Vanuatu.

FK/DL2NUD and FK/DL9GRE, Hermann and Stefan, plan to be on from New Caledonia January 16-29. Hermann will work 2M and 70/23cm EME. Stefan will operate on HF. They plan to go to Vanuatu after New Caledonia, operating February 1-16 as YJ/DL2NUD or perhaps YJ9HP.

(Editor's note: The YJ9 prefix was reported. Typically Nationals received YJ8 calls and visitors obtain YJ0 prefixes).

9L – Sierra Leone.

Four Dutch and one Liberian radio amateur will cooperate with the Mercy ships organization in a Sierra Leone operation March 15-April 4, callsign 9L5MS. They will operate from Freetown. Operators are PA3A, PA8AD, EL2DT, PD0CAV and PA3AN. They plan to raise awareness of the work of Mercy Ships, raise funds for the ships' Charity Project, and activate Sierra Leone on the HF bands. <http://www.sierraleone2011.com/>.

3B8 – Mauritius / 3B9 – Rodrigues.

Les Nouvelles DX reports next month F6HMJ, Jacques, will be QRV from Mauritius as 3B8/F6HMJ and then from Rodrigues Island as 3B9/F6HMJ. He'll be on CW, SSB and possibly RTTY on all bands. Listen for him from 3B8 between January 5th and 11th and again from January 20th to February 21st. In between January 11th and 20th he'll be at 3B9. QSL via F6HMJ.

E51 – South Cook Islands.

IW3HVB, Giulio, will be in the South Cook Islands later this month. First stop will be from Rarotonga (OC-013) from December 20th to 24th and then the Aitutaki Islands (OC-083) from December 24th to 28th.

He'll be using an Elecraft K3 with 100 watts into an 11UJX multi-band vertical and 10 meter fishing rod vertical for 40 meters. Giulio will be QRV as E51HVB on SSB only on 7057, 14267, 18137, 21267, 24957 and 28567 KHz. He will be posting his logs at www.arimarcon.it possibly during the holiday style operation if he can find an Internet connection. QSL via IW3HVB either direct or via the bureau.

S21 – Bangladesh.

Starting December 16th JH1AJT (S21Z), Zorro, will be leading an international team to Dhaka, Bangladesh where they will be QRV as S21FGC until early December 21st. Other team members include JJ1LIB, JP1TRJ, KL2A, DS4EOI and A51HI. Activity is expected on 1.8 through 28 MHz on CW and SSB with an emphasis on 160, 80 and 40 meters CW. This operation is being supported by S21VA, Dr. Zahudul Haque Shipon, Vice President of Bangladesh Amateur Radio League. QSL via JH1AJT.

JD1/O – Ogasawara.

JD1BLY (J15RPT) and JD1BMH (JG7PSJ) will be on Chichijima Island, Ogasawara, 160-10 focusing on the low bands, December 24-January 8. They will do satellite, CW, SSB and digital. Further refinement on the dates: JD1BLY will be December 24-January 3 and JD1BMH will be December 30-January 8. QSL to their home callsigns. `BLY's log search will be on <http://www.ji5rpt.com/jd1/> and the `BMH log search will be on: <http://sapphire.es.tohoku.ac.jp/jd1bmh/>. And follow them on Twitter at <http://twitter.com/jd1bly> and <http://twitter.com/jd1bmh>.

VK9X – Christmas Island.

Seven members of the upcoming VK9X DX Vacation to Christmas Island now

have their callsigns. They depart Perth, Western Australia for Christmas Island January 13th and return to Perth on the 20th, one week in all. Here is the operator lineup:

VK9XA JA3BZO digital
VK9XL JH3PBL SSB (YL)
VK9XO JA3AVO CW
VK9XXY JH3LSS CW
VK9XN JI3DNN CW, SSB, digital
VK9XJR JA3UJR CW
VK9XJ JA3HJI SSB
No VK9X callsign yet: JA3ARJ SSB

T88ZM – Palau.

5B4AGN (G3ZEM), Bob Henderson, plans to be in Palau, IOTA OC-009, February 2-8. He will operate CW only from the "Palau Rental Shack," with the callsign T88ZM. Bob says he "may stray occasionally onto RTTY." Next, he will go to KH0/G3ZEM to operate February 9-16, using "The Saipan Rental Shack," <http://saipan.rental-shack.com/english/index.html>, "so antennas are as provided without opportunity for changes." He says if the low bands are productive he will spend time there at local sunrise and sunset. QSL via M0URX.

Here are instructions to QSL direct: <http://www.m0urx.com/direct-a-bureau-instructions.html> and bureau: <http://www.m0urx.com/qs1-request-form.html>. Logs will be on LoTW as soon as Bob can arrange it.

IOTA NEWS.

The MS0INT team plans to operate from EU-010 (Benbecula, Grimsay, Baleshare, North Uist, Berneray) EU-059 (St. Kilda Archipelago) and EU-111 (Monach Isles) between June 15 and 22 of next year. Team members include MM0NDX, EA2TA, EA3NT, F4BKV, IZ7ATN, SM0MDG and possibly others. They have a Website at <http://www.ms0int.com/>. QSL via M0URX.

The group calling itself the "Navajo DX Team" will be on Herne Island, AF-068, Morocco, February 1-5 with the callsign 5C2L. They plan to be active on the HF bands and will try to get to the World

Change of 40m WAI Frequency

**Please note that the
40m WAI Frequency has
been changed from
7.068 to 7.170**



The Daily DX - is a text DX bulletin that can be sent via e-mail to your home or office Monday through Friday and includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and much, much more. With a subscription to The Daily DX you will also receive DX news flashes and other interesting DX tidbits. Subscriptions are \$49.00 for one year or \$28.00 for 6 months.

Get a free two weeks of The Daily DX or a free sample of The Weekly DX by sending a request to bernie@dailydx.com.

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Flora-Fauna Park, Dakhla. QSL to I8LWL. <http://www.i8lwl.it/>.

In celebration of the 20th anniversary of the reunification of German special event station DL20Y2DM will be QRV from Bremen, Germany until August 31, 2011. QSL via the German QSL bureau.

Some time between January 7 and 22 VE3LYC and PA3EXX are planning to be QRV from Wollaston Islands (SA-031) and Diego Ramirez Islands (SA-097).

ZD9

Tristan da Cunha & Gough Island.

Ulli, DL2AH was QRV recently as promised as ZD9AH operating from Tristan da Cunha & Gough Island. Running 100W into a dipole antenna produced some remarkable signals and several EI's made it into his log from 40m through to 10m. This was a holiday style operation and Ulli will begin the QSL process in early January upon his return. QSL via homecall, DL2AH.

Also from this remote region was ZD9T with Dieter, DJ2EH operating. Dieter was QRV since November 20th and has been worked from 160m through 12m mostly CW. This operation is to be QSLed to DJ2EH.

TJ3AY - Cameroon.

It's amazing what a little activity can do. For years there's nothing, no permissions or licences granted and then, as if by magic, a valid operation is granted permission and presto, suddenly this rare and wanted entity is practically wiped out, worked all slots from 160 - 10m. Cameroon is another of these illusive entities and has not been very active as of late. I was surprised to notice that I had only the one QSO with a TJ station in my log and this was for a 2005 QSO. The good news is that Henri, F6EAY, is in Cameroon for the next few years, operating as TJ3AY with an R6000 vertical, 40M dipole and an amplifier. F5LGE will be handling the QSL chores but does not expect to send any out until February, 2011. The printing of the cards is not done yet. Henri will be active on 40m through 6m RTTY and SSB and has already been worked from 40m through 10m in EI. I'm sure that many EI's will get to work this one and hopefully will provide some needed bands towards your Challenge award.

So what does the coming holiday season

hold for you, and what is your New Year's resolution going to be?

Is it a chance to catch up on some long overdue QSLing? or perhaps a chance for some operating.

Remember the 80m counties contest in kicking off at 14:00 on the 3rd January 2011. This of course is an ideal chance to qualify for your WEIC award and has proved very popular since it's introduction in 2006.

A highly enjoyable and recommended national event. Try to set aside some bit of time for your hobby over the festive season though, try to re-kindle your interest in radio and even put out a CQ call. You could be pleasantly surprised who comes back to you.

As usual, thanks to Bernie W3UR of the Daily DX for allowing information to be extracted for these pages.

Wishing you all a very Happy Christmas and a DXfull 2011.

Until then, vy 73.

de Dave EI9FBB

Understanding LF and HF Propagation - free ebook

Steve G0KYA and Alan G3NYK, of the Radio Society of Great Britain's (RSGB) Propagation Studies Committee, have released a free ebook called Understanding LF and HF Propagation'

In 2008/2009 Steve and Alan wrote a series of features on LF and HF propagation for the RSGB's "RadCom" magazine.

You can download your free copy of "Understanding LF and HF Propagation" at www.g0kya.blogspot.com

The coolest Contest & DX Meeting of the year 2011!

Contest Club Finland (CCF) and OH DX Foundation (OHDXF) are happy to invite you with your families and friends to join the 16th CCF & OHDXF Contest and DX Meeting on 21-23 January 2011.

The meeting will be a traditional ferry cruise on the Baltic Sea, including 3 DXCC countries :

OH - OH0 - SM - OH0 - OH

Our ferry m/s Silja Symphony : <http://www.tallinksilja.com/en/shipsAndTerminals/symphony/>

On the agenda (tentative) :

A major DX/Contest DXpedition

*New waves in SM; * Antenna analysis
* Remote operating * CW Skimmer and SDRs : * YO "599" project - Contesting in Romania: * Light weight contesting
* How's 5R8: LOTS of good company and rag-chewing with the like-minded!

For more details on the cruise agenda, packages & prices, how to book in, etc. :
--> <http://www.ohdxf.fi/uutiset.html?9>

German postal rates

Good news from Germany!

From January 1st 2011 postal rate for an overseas airmail 1st class letter will DECREASE from currently 1.70 Euro to just 0.75 Euro. Today this is equivalent to exactly 0.991 USD.

Thus 1 USD will cover perfectly return postage to any country in the world!

Happy direct QSLing,

73 and early seasons greetings

Joe, DL8HCZ/CT1HZE

A Message from the Outgoing QSL Manager

Some time ago Sean EI2CR had a parcel of QSL cards go missing in the postal system, well it appears to have happened again.

Anthony EI2KC posted a parcel of QSL cards to the bureau on the 16th of November which failed to arrive, bearing in mind that they were posted some time before the snow hit Ireland.

When Sean EI2CR "lost" his cards it became obvious that I (outgoing QSL manager) have no idea that cards are on their way until I receive them and likewise members sending cards have no idea if they arrive or not.

Because of that I started a service where members could email me when they post their cards and I notify them when I receive them, which works very well.

Except only about half of those who send cards take advantage of the service, the other half are either unaware of the service or have complete faith in An Post.

If you would like to email me on ei8jk@amsat.org when you post your cards, I will email you back when they hopefully arrive.

Tony EI8JK
ei8jk@amsat.org

Billy Pollock GI3NVW

Billy Pollock GI3NVW is one of West Tyrone Amateur Radio Club's most experienced license holders.

Last year marked Billy's fiftieth anniversary of obtaining his licence, which truly is a huge achievement for any amateur.

The following is a short history of Billy's involvement in the hobby in his own words.

My first interest was plumbing, but I soon found out it was cold hobby as it had to be done outside. At age 14 years I changed to electricity then radio.

My father managed to get me into the workshop of Bob Grey who fixed sets in a little workshop in the Market Yard on Saturdays.

No pay and I was not entirely welcome to start with but after I showed some aptitude he became less gruff.

This guy seemed to be magic, he could always fix the sets quickly without much diagnosis, eventually I discovered he knew what the fault was when the customer came through the door.

No magic, he had seen it all before, standard faults - and he didn't like when some odd fault arrived, I got these to do!

I acquired a load of old sets from Hynes Radio Shop which were multiplying in their store. Great supply of components and a challenge to see if any could be got going.

As kids we all wanted to get Radio Luxembourg, the BBC didn't broadcast pop music then (no Radios 1 or 2).

The first DX!

We used to go to Poppy McFarlane's



scrap yard on the Crevenagh Road, a virtual goldmine of ex-second world war kit, got an R1155 receiver (ex bomber command) and heard the shortwaves and radio amateurs on the 80 metre band AM. There were no amateurs in Omagh, the nearest was Matt Mulcaghy (real name Wilson Guy). He lived in Fintona and wrote a weekly column for the Con. I went and introduced myself, great excitement, a real live amateur station and he came on the next Sunday and mentioned my name in the QSO - boy was I pleased!

I needed a licence badly so I did the City & Guilds (London) correspondence course and they arranged for myself and the late Bobby Sloane GI3NRF to sit the exam at the Technical College (beside the Academy). We both passed in 1957.

The next hurdle was Morse but there was no one to teach it. Eventually Ken

GI3VQ came to work in the Labour Exchange. He was a merchant navy operator in the war and he was good but it took another 2 years, too many other interests and lack of drive.

Got it in November 1959 when I went to University and wanted to operate the club station.

We used to build all our gear, no commercial rigs then. I remember converting a Bendix TA 12 transmitter to cover the 80, 40 & 20 metre bands. It could run 100 watts output of AM (used in the Boeing B17 bombers with the BC-348 RX).

My RX then was the BC348 which I remember taking home on the handlebars of a Raleigh Lenton bicycle.

A beautiful RX with really good mechanical drive on the VFO covered to 18.5 m/cs so we didn't get to hear 15 and 10 metres until later - no WARC bands then either.

SSB appeared in the early 60s in the US and we couldn't make out the "Donald Duck" noises on the band until we found out that the RX had to be in CW mode to resolve SSB.

I built a copy of the G2DAF designed SSB transmitter with a 600 watt Linear using a 4CX250 forced air cooled tube obtained from a tea chest full of valves from Poppy McFarlane's for 2 shillings & sixpence after much negotiation to get him down from 5 bob (25p today).

I had this rig in Belfast at the flat in The Mount where we lived after we got married and I was working in Shorts Aircraft Factory.

The only time my station was inspected by the GPO was then and I was working on the day so Dorothy showed the guy



the gear. I was really worried when she said he looked at the linear because of the output capability of it but he didn't see any big glass valves so no problem, he told Dorothy "he will not do much harm with that" shows what he knew!

We came back to Omagh in 1966 and I set up station at 5 Campsie Road, eventually putting up a 60 foot tower and a tri-bander. I built a solid state all band transceiver producing 2 watts output which drove the linear to 400 watts

At this stage commercial gear was coming in, Heathkit if you wanted to build it and the first Yaesu FT101's still all valved rigs.

There was American gear like Collins but it was all far too expensive as it was originally designed for the military.

In the mid 70s, 2 metres was all the rage with the new B licences which did not require 12 words CW allowing VHF bands only. A lot of rigs appeared from Japan running 10 watts out.

We started a successful local club which first met at my QTH every Monday evening when I lived in town and had plenty of room, the shack had 3 rooms then!

This led to many construction projects probably all piloted by me. We built 20 amp PSU's for the solid state rigs and 40 watt amplifiers for the car to improve the mobile capability.

Then came the NI repeater, a misnomer as it only covered a limited area around the Belfast area.

We weren't happy about its location so the thing to do was set up in opposition and WT was born, eventually arriving on its present site and were we pleased. You could work easily from Supermac (Forestside today).

I have been in the chair of the repeater group ever since.

I used to be pressed into repairing rigs and someone suggested I should sell them as well and T A Electronics was born in 1981.

Since its not feasible to build rigs today and this a pity, a great loss to the hobby I think, it was a common talking point in most QSOs, now it's the wx! Its not so easy to get a conversation going today.

Where you can still make the difference is outside if you have the space available. People say its too expensive to put up towers etc then they go off and buy a rig/linear at £5,000 + in many cases.

100 watts from some old classic gear into a tribander at 50 feet will easily whack the £5,000s worth attached to a G5RV at 30 feet.

DXCC Entities with no QSL Bureau

A3	Tonga	ST	Sudan	ZD7	St Helena
A51	Bhutan	SU	Egypt	ZD9	Tristan da Cunha
A6	U.A.E.	T2	Tuvalu	3B	Mauritius
C21	Nauru	T3	Kiribati	3DA	Swaziland
C5	Gambia	T5	Somalia	3W	Vietnam
C6	Bahamas	TJ	Cameroon	3X	Guinea
CN	Morocco	TL	C. African Rep	4J	Azerbaijan
D2	Angola	TN8	Congo	5A	Libya
D4	Cape Verde	TT8	Chad	5R	Madagascar
E3	Eritrea	TY	Benin	5T	Mauritania
HH	Haiti	V3	Belize	5U	Niger
HM	North Korea	V4	St Kitts / Nevis	5V	Togo
HV	Vatican	V6	Micronesia	7O	Yemen
HZ	Saudi Arabia	VP2E	Anguilla	7P	Lesotho
J5	Guinea Bissau	VP2M	Montserrat	7Q7	Malawi
J6	St Lucia	XU	Kampuchea	8Q	Maldives
J8	St Vincent	XW	Laos	9L	Sierra Leone
P2	Papua N Guinea	XZ	Mynamar	9N	Nepal
PZ	Suriname	YA	Afganistan	9Q	Zaire
S7	Seychelles	Z2	Zimbabwe	9U	Burundi
S9	Sao Tome	ZA	Albania	9X	Rwanda

Please do not send cards to the Outgoing QSL Bureau for these DXCC entities

Echo India Four Lima re-issued

John Kelly - formerly EI4HS - has recently been issued with the callsign EI4L, which was previously held by his grandfather.

EI4L was issued originally to John Scanlon in 1936.

He was one of the true pioneers of radio in this country, he experimented with television in the years after World War 2 and was also a very active HF DXer.

John Scanlon became a silent key in 2004. His call sign lives on, however, with his grandson John Kelly.

As EI4HS, John has been very active on the bands and is a regular participant in the two metre counties contests, so expect to hear plenty of activity from EI4L over the coming months.

Input for the Radio News and Echo Ireland can be sent to:

newsteam@irts.ie

Limerick Radio Club News.

The Limerick Radio Club Website has now been ported to its own domain at www.limerickradioclub.ie.

Lots of new features will appear over the coming months and members are encouraged to let us know of ideas they may have for features they would like to see on the site.

Many thanks to Simon EI7ALB and Gerry EI3JU for their work on the site.

The club contest call EI0A got its first airing in the CQWW SSB contest by Ger EI4GXB

A total of 1108 QSO's, 107 countries, 6 continents and 42 states were contacted and we wait with interest on the final results.

The final flight of the space shuttle Discovery STS-133 was linked to the Limerick Repeater via IRLP and we hope that many listeners enjoyed the live audio.



Above the Horizon

with Charlie Carolan EI8JB

Welcome to another edition of Above the Horizon, unfortunately I have not had a whole lot of time for radio since my last edition; I hope to get some more time to experiment soon.

ISS New Amateur Radio Crew

On 17 December, a new trio of flight engineers, which includes two licensed radio amateurs, is expected to arrive at the International Space Station following a 15 December launch. They are US astronaut Catherine Coleman, KC5ZTH, the European Space Agency's Paolo Nespoli, IZ0JPA and Russian cosmonaut Dmitry Kondratyev

ARISSat en-route to Moscow

ARISSat-1 was shipped from Johnson Space Center on November 24. It was held in Germany until Saturday, December 4 at which time it was transferred to Russia.

Energia representatives are expected to have picked up the hardware. The Russian team will install the battery and the Kursk University experiment and will then be joined by U.S. team members.

Together, the team will test the satellite for flight.

A final safety review will follow in January. ARISSat-1 is scheduled to launch on Progress 41P on January 28 for a Scheduled deployment during EVA R-28 in February 2011.

December 2010 AO-51 Schedule

December 12 (late UTC)

FM Repeater, V/U

Uplink: 145.920 MHz FM (no PL tone)

Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, V/U

Uplink: 145.860 MHz FM at 9600 baud

Downlink: 435.150 MHz FM at 9600 baud

December 17 (late UTC)

FM Repeater, V/SU

Uplink: 145.880 MHz FM (no PL tone)

Downlinks: 2401.200 MHz FM *and* 435.300 MHz FM (at low power!)

December 22 (late UTC)

FM Repeater, V/U

Uplink: 145.920 MHz FM (no PL tone)

Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U

Uplink: 1268.705 MHz FM at 9600 baud

Downlink: 435.150 MHz FM at 9600 baud

December 30 (late UTC)

CW/FM Repeater, V/U For Straight Key Night

Uplink: 145.880 MHz CW

Downlink: 435.300 MHz CW over FM

9k6 Baud Telemetry

Downlink: 435.150 MHz FM at 9600 baud

FO-29

FO-29 future operation is uncertain at this time. The situation is the batteries are old and the satellite shuts down when the batteries get too low. There was a malfunction in the system that turns the transponder back on after a shutdown and it must now be commanded back on from the ground after a shutdown.

CAT Control of the Yaesu FT 847

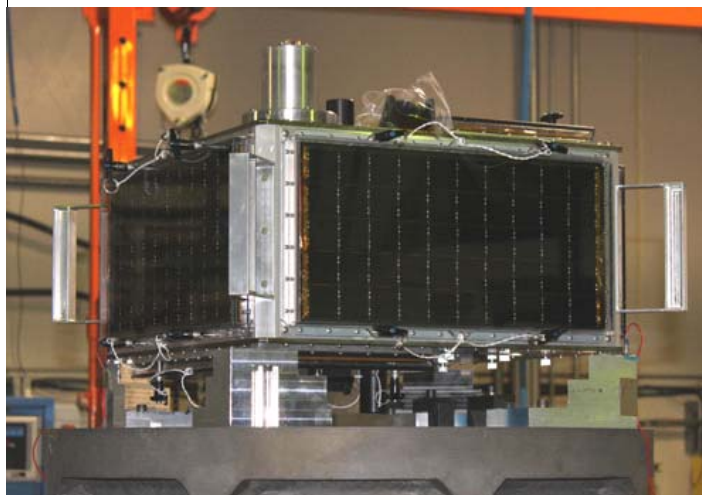
In the last issue we touched on a selection with some screen shots of various software programs that will allow Tracking & CAT control.

Basically for the linear transponder satellites (SSB) depending on mode of communication they track in Reverse Mode, FM Birds on the other hand use Normal Mode.

What's the difference between reverse and normal modes tracking?

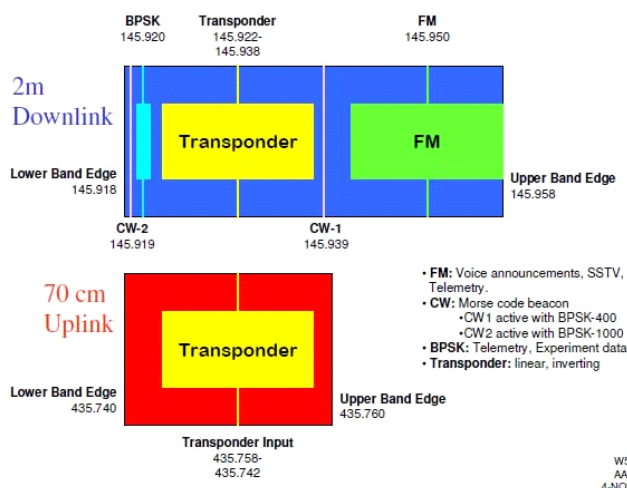
Some Sats are configured for either a selection of various modes; each of these modes may not have the same direction of tracking. Generally FM Sats use Normal Mode Tracking this is where both uplink and downlink frequencies track in the same direction e.g. frequencies increase on both modes.

Reverse Mode on the other hand is where both frequencies track in opposite directions and this is more common with the



ARISSat-1 - vibration testing

ARISSat-1 Band Plan



linear transponder Sats (SSB) & CW although the above information is very general, it is advised to confirm the Tracking mode so that you have your bands configured correctly, otherwise you will experience losses of signals once Doppler happens.

Assuming for ease instructions to get your FT 847 using CAT Control and have opted to use the SatPC32 program the basic instructions are as follows.

The FT-847 has a built-in level converter, allowing direct connection from the rear panel CAT jack to the serial port of your computer, without the need for an external RS-232C level converter box.

1) You will need a serial cable for connection to the (RS-232C) COM port of your computer. Purchase or construct a "null modem" crossed type serial cable (not a "straight" type), ensuring it has the correct gender and number of pins for connection to your system.

2) In the SatPC32 Setup, go into Radio Setup tab select the brand and model of radio (FT-847), select a comport number to enable communication and also set the CAT delay to 20.

3) The FT-847 supports 4800, 9600 and 57600 Bd. The radio is preset to 4800 Bd. Set the baud rate as high as possible, consistent with a reliable operation. All radios seem to work flawlessly with the highest baud rate. Therefore, set it to 57600 Bd.

The setting in the FT-847 can be changed with radio menu #37. Of course, it has to be identical to the setting in the 'Options' menu of SatPC32.

If all the above is done and still no CAT connection check that a Null modem cable is in use, not a serial cable? And both the Baud Rates set in the Radio and the options menu listed above are equal.

Important Notice!

It is not possible to engage the CAT System when the **FC-20** Automatic Antenna Tuner is in use. Please disconnect the **FC-20** Control Cable from the **TUNER** jack on the rear panel of the FT-847 prior to commencing CAT System control of the FT-847.

Once CAT connection is enabled you will now have a selection of Satellites that you can experiment with from the Satellite menu, these have pre programmed frequencies already installed so that you can concentrate on operation with ease.

First try receiving to get a feel for it and remember that SSB Satellites use a selection of bandwidth called pass band to use so you may have to move your tuning dial through the band to find a signal, signals are most common in the centre of each passband.

Both 2m and 70cm antennas will need to be connected to enable communication, squelch open with the RF amp enabled for the Rx band. Remember on the 847 the Rx band is the main band in the display above the tuning dial with the Tx band on the right hand side of the main display.

Once SatPC32 is open and connected by CAT to you FT-847 you will have the option to configure it to your individual needs by selecting Satellites and program features by setting up a menu.

It is advisable to become familiar with SatPC32 if that is your

chosen program for all the above, and well worth the time taken to become familiar with its features by reading the manual.

I hope you have found some of the above information useful and enjoy and good luck with your experimentation with Satellites.

I would also like to take this opportunity to wish everyone a happy new year.

73,
Charlie EI8JB

Emergency Radio Communications



Operating Position

Left to Right, APRS display(Xastir), Motorola GM350 for VHF, IC-2200 on VHF repeater, just peeking into the right, beside the map is an FT-857 on 3.660MHz

A comparison of different TCP/IP and DTN protocols using the Icom ID-1 transceiver.

**John Ronan - EI7IG, John McCarthy - EI8JA,
and Cathal O'Connor - SWL**

Abstract

In this article we examine the performance of the Digital Data (DD) mode of the Icom ID-1 Transceiver with various IP and non-IP based protocols. A throughput comparison was performed between IPv4, IPv6, the default DTN Convergence Layer and the NORM Convergence Layer.

The experimental results show that the DTN NORM Convergence Layer exhibits better performance than TCP/IP, and appears to perform better over difficult radio links.

Introduction

The Icom Digital Smart Technologies for Amateur Radio (D-STAR[1]) family of transceivers and the use of the D-STAR protocol is becoming more and more an integral part of the toolbox used by Amateur Radio operators for emergency communications activities.

The D-Star Digital Data (DD) mode (in the Icom ID-1 transceiver) is of interest as the radio transceiver presents an ethernet interface, and thus any protocol that can be transmitted over ethernet can be sent between any pair of ID-1 transceivers.

In the event of more than two transceivers operating on a single channel, which is likely in an emergency communications scenario, there would likely be a lot of traffic on a channel in contention for the same limited bandwidth.

This would be necessary in the early stages of an incident until normal communications links were restored.

To the best of the authors knowledge, little work has been done in to ascertain the impact on the TCP/IP suite of protocols (or indeed any others) of operating multiple transceivers on a single channel in this type of environment.

In some previous work[2] some initial results of experiments with DTN and IP networking using Icom ID-1 transceivers in DD mode were presented. These results were preliminary and not experimentally verified.

The approach taken was to firstly test the various protocols in a control scenario to get the best possible realistic throughput, followed by a real point-to-point link (approx 9kms between EI8JA and EI7IG).

Background

The authors interest in DTN stems from the potential of DTN to be used to support emergency communications activities, especially where multiple different network types converge i.e. AX.25[3], D-STAR and the set of 802.11 standards[4] that make up what is commonly referred to as "WiFi".

In this article we compare the performance of the TCP/IP protocols, TCP[5][6][7], versus two DTN Convergence Layer implementations namely TCP-CL[8] and NACK-Orientated Reliable Multicast Transport Protocol (NORM)[9].

Disruption/delay tolerant networking

Disruption or Delay Tolerant Networking (DTN), is an approach to computer network architecture that seeks to address the technical issues in heterogeneous networks that may lack continuous network connectivity or other extreme environments.

Some issues to be addressed include large delay for transmissions resulting from either physical link properties or extended periods of network partitioning, routing capable of operating efficiently with frequently-disconnected, pre-scheduled, or opportunistic link availability, high per-link error rates making end-to-end reliability difficult, and heterogeneous underlying network technologies (including non-IP-based internets).

The DTN architecture [10] uses in-network or node-level storage to provide an overlay network over various types of network infrastructures. This node-level storage allows application messages (bundles in the DTN architecture) to be stored on DTN gateways (or nodes) for arbitrary lengths of time, while waiting for a forward path to become available.

This clearly differs from the IP model where IP packets must be forwarded immediately, or dropped. The Delay-Tolerant Networking Research Group (DTNRG - www.dtnrg.org) has a reference implementation of the protocol [11] available for experimentation, extension and real-world deployment. See [12] for more information on DTNs.

Digital Smart Technologies for Amateur Radio (D-STAR)

Digital Smart Technologies for Amateur Radio, commonly known as D-STAR, is a digital voice and data protocol specification, published in 2001, which was developed as the result of research funded by the Japanese government and managed by the Japan Amateur Radio League [13].

The purpose of the research was to investigate digital technologies for amateur radio. While there are other digital on-air technologies being used by amateurs that have come from other services, D-Star is one of the first on-air and packet-based standards to be widely deployed and sold by a major radio manufacturer that is designed specifically for amateur service use.

The D-STAR system supports two types of digital data streams. The Digital Voice (DV) stream used, for example, on 430-440 MHz contains both digitised voice (3600 bps including error correction) and digital data (1200 bps).

Using a DV radio is like having both a packet link and FM voice operating simultaneously. The Digital Data (DD) stream, used only on 1200MHz, is entirely data with a bit rate of 128kbps. An Ethernet connection is used for high-speed DD D-STAR data.

In this article we are solely concerned with the Digital Data mode available on the Icom ID-1 transceiver.

Experimental Network

Figure 1 shows the experimental network used to measure the system performance.

Each node in the network consisted of an Icom ID-1 transceiver and a Linux PC. For D-Star testing, both the DTN reference implementations TCP Convergence Layer (TCP-CL) and the NORM Convergence Layer (NORM-CL) were used to investigate DTN performance.

NORM was chosen for examination as previous research [13]

(Continued on page 17)

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suggests that NORM would be suited for use in networks that are bandwidth constrained, or networks that suffer from high levels of packet loss.

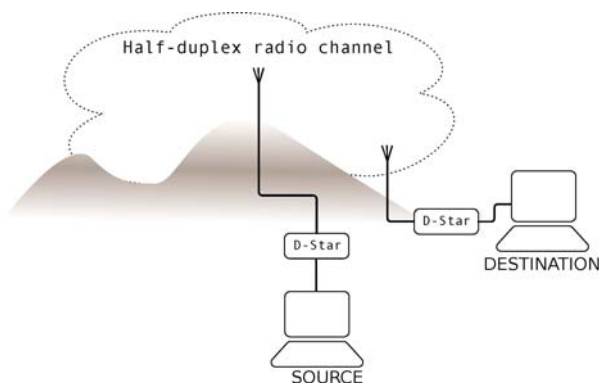


Figure 1: 9km point-to-point link, not quite line of sight

Two separate network configurations were examined.

- Control - two radios in close proximity for maximum signal strength/minimum interference.
- Point-to-Point - 9km link.

The Control configuration was investigated with both radios operating indoors in an ideal environment. In both configurations, all routing was configured statically, to avoid routing broadcasts interfering with transfer times.

Figure 1 was configured with Icom ID-1 transceivers at the QTHs of EI7IG, and EI8JA. The aerial at EI7IGs location was a Diamond X-5000 with a Diamond X-7000 at EI8JAs location. Under calm wind conditions, 2 bars of “signal” were visible on the display, with the occasional flicker of a third bar.

The following tests were done in each network configuration:

- IPv4 TCP
- IPv6 TCP
- TCP Convergence Layer
- NORM Convergence Layer

Each test was repeated 25 times to get an average throughput figure for that particular protocol. Care was taken to run the tests under similar atmospheric conditions.

The weather station (<http://aprs.fi/weather/a/EI2WRC>) situated at EI8JA's location was regularly checked for wind speed. The iperf[15] tool was used to test TCP on both IPv4 and IPv6. The results for IPv4 were generated with the following command run in a loop 25 times:

```
iperf -c 192.168.254.2 -t 600 -i 10
```

Similarly for IPv6:

```
iperf -V -c fec0::2 -t 600 -i 10
```

Where 192.168.254.2 and fec0::2 are the IPv4 and IPv6 addresses of the destination node (192.168.254.1 and fec0::1 are the source addresses).

The result was a report, with a summary line similar to the following:

```
[ 3] 0.0-601.3 sec 4.90 MBytes 68.3 Kbits/sec
```

To test the DTN Convergence Layers the *dtmsend* utility was used to send a 6MB file across the link. *dtmsend* was configured to ask for a delivery receipt, and the result of this was a report similar to the following:

```
got 33 byte report from [dtn://itx2.dtn]: time=639445.0 ms
```

From these results a spreadsheet was compiled and all results were then converted into bytes per second

Results

NORM was initially configured with a fixed transmission rate of 128kbps. After the initial testing was complete, through experimentation, it was found that configuring NORM for a rate of 84kbps seemed to provide the maximum throughput.

Table 1: D-STAR performance – control configuration

Protocol	Min (bytes/sec)	Max (bytes/sec)	Average (bytes/sec)
IPv4	8502.90	8649.84	8576.03
IPv6	5043.07	8372.66	7693.93
TCP-CL	8108.23	8306.87	8242.80
NORM-CL (128)	7850.68	8267.08	8106.88
NORM-CL (84)	9818.84	9926.74	9877.13

Table 2: D-STAR performance on point-to-point link

Protocol	Min (bytes/sec)	Max (bytes/sec)	Average (bytes/sec)
IPv4	85.69	3449.95	1117.19
IPv6	0 (Note 1)	4268.80	1732.88
TCP-CL	1904.04	7668.61	5527.75
NORM-CL (128)	4440.96	8014.53	6490.19
NORM-CL (84)	1906.23 (Note 2)	8632.93	4362.66

Note 1: test runs timed-out before they could complete

Note 2: High winds were experienced on this run - see discussion section below

Discussion

Looking at Table 1, results seem in line with general expectations. IPv6 achieved less throughput than IPv4, as it has a larger packet header size. The DTN TCP-CL average throughput is between IPv6 and IPv4, i.e. the DTN overhead on an IP

v4 packet is less than IPv6 Header overhead. The NORM result is interesting, setting the transmission rate at 84kbps results in an average that is approximately 1300 bytes/sec faster than the next best which is IPv4.

Initially, it was planned to include a scenario with a single hop and, also, a node generating interfering traffic. However, when testing began on the point-to-point link it was found that it was far more difficult to achieve a usable, solid connection than prior experience had suggested.

Also, a row of trees had grown into the fresnel zone and it was not (legally) possible to have them cut back. This coincided with a period of windy weather, which meant days suitable for testing were few and far between, as the X-7000, being a large vertical antenna, tended to sway in the breeze as did the trees. Changing to a beam antenna did not help the situation either

Looking at Table 2, moving to the “real-world” is even more interesting. Two of the IPv6 test runs were unable to even start. Both times the TCP connect was sent, no reply was received, this resulted in the connection timing out eventually. All other protocols completed 25 test runs.

(Continued on page 18)

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The RF path was, in a word, hostile, and this can be seen in the results. IPv4 and IPv6 average throughput reduced significantly. IPv6 has a higher average of the pair, but we are of the opinion that this was due to weather conditions favoring the IPv6 test run (the order of tests was generally IPv4, IPv6, TCP-CL, NORM-CL).

A NORM test run with the rate set to 84kbps was run, however wind conditions at the time were far far higher than the others so an attempt was made to stop the run.

Interestingly, the TCP session was unable to deal with the poor RF connection and it eventually timed out, so we were unable to stop the test run.

The following morning, after the test run completed (astonishingly enough), it was still impossible to log into the machine remotely over the RF connection to retrieve the log-file, however NORM had successfully transmitted all data. These results really are a testament to how robust the NORM protocol is for data transfer, under conditions where TCP is unusable.

Conclusion

From previous work, we had seen the DTN NORM Convergence Layer showed signs of being more efficient than the TCP/IP protocol over DD mode D-Star radio links.

A 15% improvement using NORM over IPv4 is significant enough, what we did not expect to see was a dramatic difference between the robustness of NORM vs TCP.

Looking back at the results, the TCP tests they appear to be broadly in line with what would be expected, in that the throughput is best in IPv4, then TCP-CL, then IPv6.

On Icom ID-1 transceivers, NORM appears to have a optimal transmission rate of 84kbps which gives the 15% improvement over IPv4.

The robustness of NORM was not something we expected, this became apparent due to the difficult RF path between both sites and is worth highlighting.

The measurements taken provide an illustration that, even without considering robustness in the face of disruption, the ubiquitous TCP/IP protocol is not *always* the best choice.

Future work will include re-location of one of the two point-to-point stations for a more reliable connection.

With that in place work can be done on multi-hop transfers and whether DTN performs better in this scenario.

At this time the impact and stability of routing protocols in this environment can also be evaluated.

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Review: The new Examination Syllabus

Earlier this year it was announced that a revised syllabus would come into effect in 2011 for the Amateur Station Licence Examination.

The existing syllabus, in use up to the end of this year, is the HAREC syllabus document produced by CEPT which was drawn up originally about 20 years ago. The CEPT document is generally comprehensive, but is heavy going and even opaque in places.

The revised syllabus, developed by the IRTS Examinations Board and approved by ComReg, drew on the experience gained since the Examinations Board took over responsibility for the examination and, we are told, also took account of feedback from candidates and tutors.

We have been looking at the new syllabus to see what revisions have been made.

The formal announcement of the new syllabus (see Echo Ireland, June 2010, page 12) promised ...

- "... a more structured and focused syllabus ..." which would
- "... better reflect the topics to be covered ..." and
- "... assist candidates and tutors to understand the extent and depth of knowledge required ..."

So how does it meet the promise?

The first thing that strikes us looking at the new syllabus document is that we are given "Notes for Candidates" side by side with some of the syllabus headings.

While we are warned that the notes do not "... in any way limit the scope of questions that may be asked ..." they certainly help to highlight where the focus should be in at least some of the areas. The very first note is interesting in that it stresses that an intuitive understanding of what happens when resistors are put in series and parallel is important – with a clear hint that this is just as important as mathematical ability when it comes to the exam.

That hint will be welcomed by those who take up the hobby 20 or 30 years after leaving school: so often, lectures on radio theory start with Ohm's Law in a very mathematical way that is off-putting unless you have kept up your mathematical skills!

Section A of the new syllabus – which is focused on electronic and radio theory – covers much the same ground as the CEPT document although, in keeping with the non-mathematical approach referred to earlier, we are not confronted with the abstruse formulas which the CEPT document is sprinkled with.

Again, the notes for candidates, while far from comprehensive, certainly give some useful pointers.

The new syllabus really comes into its own in Section B, which covers licensing conditions and operating procedures.

The CEPT document was, of necessity, somewhat sketchy on the question of licensing conditions, as these vary from country to country.

In the new syllabus, we have a clear statement of what is covered, with a listing of the ComReg and other regulatory documents that are relevant.

Also, one of the annexes to the syllabus document covers, in simple English, the Radio Regulations relevant to the exam.

We get a full listing of the areas to be covered on operating procedures, which the CEPT document had left somewhat up in the air.

Helpfully, we now know that permitted frequencies, modes etc. only up to 440MHz will be covered in the exam and, as far as national call sign prefixes are concerned, it is only expected that candidates be familiar with European and North American call signs.

No doubt there will be much relief that the Samoa Islands call sign prefix is off the syllabus!

The final section covers EMC and safety. We note in particular that the safety section is more comprehensive than the CEPT document: it was never clear what CEPT intended would be covered under the headings "The human body" or "Mains power supply"; the new syllabus spells out what these headings cover, a big improvement.

Conclusions

Anyone hoping for an "easier" syllabus and examination scheme will be disappointed.

However, we know that the HAREC qualification is an international one, with standards set by CEPT, so we were not expecting a less demanding document. The new syllabus is certainly more accessible than the original CEPT document and in general we feel that the Examinations Board has achieved what it set out to do.

Taken together with the Notes for Candidates, the syllabus should make it easier for tutors and candidates to develop a course plan.

We would urge everyone involved in preparing for the licence examination to read the syllabus and Notes for Candidates carefully: bear in mind that the role of a syllabus is to be an outline of the course content as well as an aid to learning.

Dave EI4BZ

IATC.IE
Irish Amateur Television Club



The new Irish Amateur Television Club Website is now up at www.IATC.ie. The site contains repeater information, details of member projects and more. Please take the time to have a look and contribute if you can. We are particularly looking for submissions to the Gallery and Project pages. Email anything you think will be of interest to other operators or enthusiasts to ei9ed@iatc.ie

Ronnie, EI9ED



Excerpt from the HX files

A Look at ATV with Pat Fitzpatrick EI2HX - Excerpt 013

Hello and welcome to excerpt 13 of the HX files.

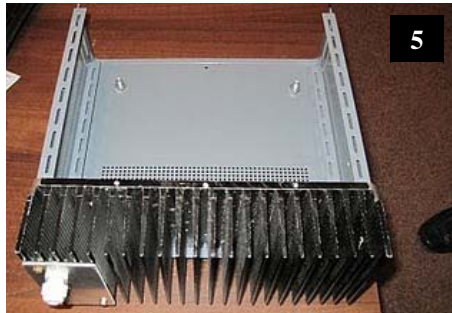
In this issue I would like to talk about the new mobile unit I am making. After operating mobile for many years I decided to make a new mobile unit.

It was taking the fun out of setting up /p when I had to connect the Tx unit to the amp, the monitors and their dc leads, and having to disconnect the aerial and connect it to the Rx.

As you /p'ers know, the cables seem to have a life of their own and seem to knot together and by the end of the experimenting you would have a ball of wires at the end of the day.

This unit would be an all in one; it would have a transmitter, receiver, and a small monitor installed also I would be installing a 25 watt amp as well. This unit will save me a good bit of time as when I get to the site as all I have to do is connect the aerial, camera and the dc and I am good to go.

And when the fun is over I would be on the way home in a few minutes and not spending ages taking everything down and packing it away while the base station I just worked only has to switch off



and head for the tea.(the lucky #*!>*<^). I was looking for a suitable project box in a Maplin store, and the ones they had were a bit too pricey for the size I wanted (and my pocket). So I had a look in my own stores, a.k.a. the shed and after a while of digging in the shed I found the one you see in this issue. The first job was to make chassis for the parts (this was made from some of the computer panel's I had cut up that I mentioned in a previous issue) and to layout the parts for the best use of the project box and to ensure that the layout was as serviceable as it could be so I could improve on the design by adding other parts in the future. (Like a pre amp).

Laying out the parts took a few tries as I had to make sure the parts would be easy to access to adjust if needed and I would also be able to add or remove a faulty unit on it's own and not have to do a complete teardown.

The first job I did on the project box was to fit the monitor, speaker, i.e.d.'s and switches to the front, (Photo 1) a few pages were used in drawing the mock-up for this.

The next job was to checkout how the heat sinks would perform under test. I had a small slab of aluminium plate that could be mounted on the back panel (Photo 2) or one that was much bigger and this one had fins as well. The amp was mounted on to the heat sink after some compound was used and as this was only a test I held the amp onto the plate

by cable ties. After only 5 minutes the temperature rose to 44 degrees, way too hot and when second heat sink was used (photo 3) this was the best, as after 35 minutes this was only 33 degrees.

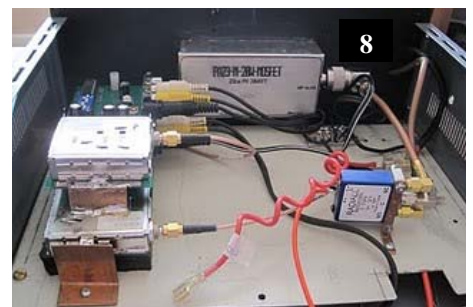
(Photo 4)

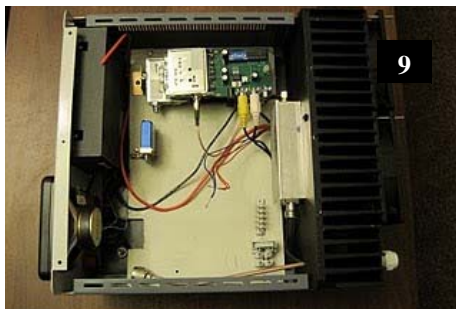
These tests were done without any cooling fans and this heat sink was drilled and cut to size and was used as the back panel of the unit. A small piece of metal was used to make a panel to mount onto the back of the heat sink; this would be used to accommodate the aerial socket (N type) and audio/video sockets (phono) and the 12v dc line (a gland would be used for the cable to go through safely). (Photo 5).

The first couple of layouts of the parts (Photos 6 and 7) were setup with some wires and coax attached.

In photo 8 you can see more of the cables and leads and I decided to put as many of the wires under the chassis as this would make the unit look tidy.

Photo 9 shows some of the parts in their final location, but as always this could be





changed as the project developed as this is prototype 001 and who knows what might happen when the unit was up and running.

Photo 10 shows the finished back panel but without the fan guards and the dc leads.

Photo 11 shows the finished unit after a few hours of transmitting both into a dummy load and on air, with some modifications of the parts, one being the relay. It was running hot so it was mounted on some heat sink, (see photo 12 before I found the right bolts) and the other being the coax from the N type to the relay.

It was decided to use some hard-line coax as the transmitter was losing power. The original seemed to be intermittently losing power and if it was not for the watt

meter I would not have known and who knows I could have let all the smoke out in a few weeks of usage.

It was only when the connections were been rechecked and tightened that it was noticed when the coax was held that the RF power dropped.

When I decide to install the pre-amp and a different relay I will be making a new chassis out of metal again as the prototype one was getting like a sieve and I will paint it to match the outside of the unit or it could be made from a piece of Perspex .

As a point of interest, the tools I used in constructing this project were, a cordless drill, various drill bits, including a stepped one that is shaped like a cone, a hole punch, various files and a tap and die set. Most of these tools are available in your local German or hardware store and the ones I used were in the mid price range.

That is it for this issue, you can check out my blog (woooooowho) thehxfiles.blogspot.com where you can see other pictures of this project and all the HX files from Echo Ireland, the Journal of the Irish Radio Transmitters Society. And finally, thanks to Michael EI5GG for his help in some of the drilling and tapping on the project and of course his years of experience in the construction field.

Also I would like to wish you and your family a very Happy Christmas and a prosperous New Year.



Sean EI4GK visiting Jan SP9JZT in Tarnow, Poland.

Jan spent four years in EI using the call EI9JN. During that time he joined IRTS, was heard regularly in a variety of contests and was part of IOTA contest teams on Saltee, Arranmore and Tory Islands.



Sean Martin trading at the Mayo Rally



Gary O'Hanlon of South East Communications who made the long trip from Waterford to Castlebar for the Mayo Rally.

Contest Calendar

All Times UTC

December 2010

18	Sat 0000 - 2400	OK DX RTTY Contest -	RTTY
18	Sat 0000 - 2359	RAC Canada Winter Contest -	CW/Phone
18-19	Sat 1400 - Sun 1400	Croatian CW Contest - CW	
25-26	Sat 1500 - Sun 1500	Stew Perry Topband Distance Challenge -	CW

January 2011

3rd	Mon 1400 - Sun 1700	IRTS 80m Counties Contest	CW/SSB
8-9	Sat 1800 - Sun 2400	ARRL RTTY Roundup	RTTY
8-9	Sat 2000-2300: Sun 0400-0700	EUCW 160m Contest	CW
15-16	Sat 1200 - Sun 1200	Hungarian DX Contest	
28-30	Fri 2200 - Sun 2200	CQ 160m Contest	CW
29-30	Sat 0600 - Sun 1800	REF Contest	CW
29-30	Sat 1300 - Sun 1300	UBA Contest	SSB

February 2011

5-6	Sat 0001 - Sun 2359	10-10 Int. Winter Contest	SSB
5-6	Sat 1800 - Sun 1759	Mexico International RTTY Contest	RTTY
12-13	Sat 0000 - Sun 2400	CQWW RTTY WPX Contest	RTTY
12-13	Sat 1200 - Sun 1200	Dutch PACC Contest	
25-27	Fri 2200 - Sun 2159	CQ 160m Contest	CW
26-27	Sat 0600 - Sun 1800	REF Contest	SSB
26-27	Sat 1300 - Sun 1300	UBA Contest	CW

Amateur Portable Group EI0Z/p at Slane Castle

Slane Castle is located in the town of Slane, within the Boyne Valley of County Meath. The castle is the family home of the Conyngham Marquessate since the 1700s. The present head of the Conyngham family is the seventh Marquess Conyngham, and the castle is owned by his eldest son, Henry, the present Earl of Mount Charles, continuing an active association between the Conynghams and Slane Castle dating back to the beginning of the eighteenth century.

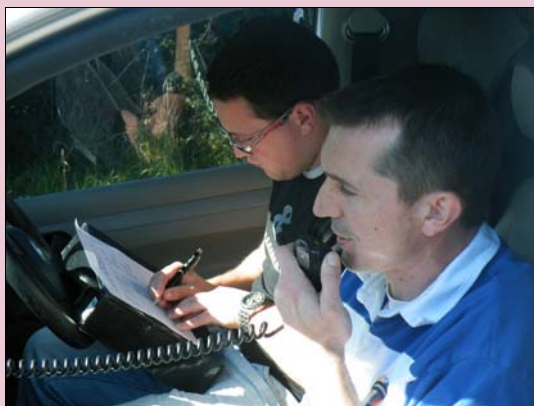


On Sunday September 26th last the Amateur Portable Group, EI0Z/p, paid a visit to Slane Castle (EI007/C) to activate it for the CASHOTA - Ireland programme. (www.cashota-ireland.org).

This time for a change they had a leisurely 1000 start and on arrival on site the sun broke through the clouds on what turned out to be a warm sunny day, always a bonus for the portable operator.

The setup on this occasion was three 6 metre fishing poles and a half size G5RV, matched to a Yaesu 847, Yaesu 897D, Yaesu 857D and a Kenwood TS50.

The operators on the day were EI8JB Charlie, EI6GHB John, EI7GEB David and on his first activation with the group SWL EI-1615 Daniel.



Dave EI7GEB and Daniel EI-1615

As this activation coincided with the re-launch of the Worked All Ireland Award Scheme they were also giving out the WAI number N97 Meath along with the grid IO63rr.

The bands on the day were lively with a wide spread of European contacts with Morocco, Cuba and North American stations also being logged.

Around lunchtime Lord Alex Mountcharles paid a visit to the station to see what they were up to.

At 1530 they closed down and packed the station away and headed to the QTH of EI8JB for coffee and to discuss another successful activation and start planning for the next one. We would like to thank all the stations that made contact and a special word of thanks to Lord Alex Mountcharles for the kind use of his property.

Slane castle is famous worldwide for the rock concerts, but it is also open to the public for guided tours.

More information at:
www.slanecastle.ie

Daniel EI1615 is no longer a member of the group.

John EI6GHB



John EI6GHB and Charlie EI8JB

Pictures from the Mayo Rally 2010



**Derek EI7CHB with Madeline SWL
(EI4DIB's XYL)**



Jim Bob MIOJBT



**Brendan EI1429, Jim 2IOSBI
and Aidan EI5KB**



Raymond Long EI9DM



Islands on the Air Contest

EI Records (inc. 2010)

DXpedition, Multi-Operator, Mixed Mode, 24 Hour,

High Power	EJ2MT	10,202,165	3,209	505	2005
Low Power	EJ1DD	2,262,708	1,441	252	2009

Fixed, Multi-Operator, Mixed Mode, 24 Hour,

High Power	EI7M	6194952	2,632	417	2002
Low Power	?	?	?	?	?

Unassisted, DXpedition, Single-Op, Low Power, 24 Hour

Mixed	EI9JQ	884,856	788	161	2007
CW					
SSB					

Unassisted, DXpedition, Single-Op, Low Power, 12 Hour

Mixed					
CW					
SSB	EI5JQ/P	78,660	172	57	2010

Unassisted, Fixed, Single-Operator, High Power, 24 Hour

Mixed	EI5DI	1,422,330	1,445	182	2010
CW	EI4BZ	477,480	660	115	2001
SSB	EI8IR	2,546,061	2,091	217	2004

Unassisted, Fixed, Single-Operator, Low Power, 24 Hour

Mixed	EI4CF	336,936	628	101	2007
CW					
SSB	EI/ON4EI	661,272	1,020	118	2009

Unassisted, Fixed, Single-Operator, QRP, 24 Hour

Mixed					
CW					
SSB					

Unassisted, Fixed, Single-Operator, High Power, 12 Hour

Mixed					
CW	EI4DW	181,944	382	76	2002
SSB	EI7GL	612,456	424	151	2001

Unassisted, Fixed, Single-Operator, Low Power, 12 Hour

Mixed	EI8GS	446,124	970	94	2007
CW	EI4CF	365,148	511	108	2009
SSB	EI4GXB	380,352	380	112	2009

Unassisted, Fixed, Single-Operator, QRP, 12 Hour

Mixed					
CW	EI8FH	11,730	62	23	2010
SSB					

Assisted, Fixed, Single-Operator, High Power, 24 Hour

Mixed	EI2JD	2,909,280	1620	290	2009
CW	EI6KC	754,314	1,358	121	2010
SSB	EI9HX	1,177,176	1,200	154	2009

Assisted, Fixed, Single-Operator, Low Power, 24 Hour

Mixed					
CW	EI9ES	163,680	216	88	2008
SSB	EI7JZ	135,561	227	73	2010

Assisted, Fixed, Single-Operator, QRP, 24 Hour

Mixed					
CW					
SSB					

Assisted, Fixed, Single-Operator, High Power, 12 Hour

Mixed	EI3IO	456,492	584	109	2008
CW					
SSB					

Assisted, Fixed, Single-Operator, Low Power, 12 Hour

Mixed					
CW	EI2JD	84,630	107	70	2010
SSB	EI3HA	71,736	167	56	2008

Assisted, Fixed, Single-Operator, QRP, 12 Hour

Mixed	EI8JB	33,264	96	36	2010
CW					
SSB					

Radio News Deadline

Noon on Thursdays

News Editor:
Charlie Carolan EI8JB

News input to:

charlie.carolan@gmail.com
or
newsteam@irts.ie

Telephone:
087-6265418

Raising money for the Royal National Lifeboat Institution through Amateur Radio

SOS Radio Week January 22nd to 30th 2011

This is an Amateur Radio event that raises money for the lifeboat service. We had only one participant station from EI last year. Can we improve on that?

To register for the event, visit the website at www.sosradioweek.org.uk and click over the Register option on the menu. Once registered you'll be able to download the official sponsorship forms and lots of other useful documentation.

RSGB 2010 HF Convention

The Radio Society of Great Britain (RSGB) hold an annual convention each October running from Friday night until Sunday afternoon. This can be attended either as day trips or as a residential weekend.

This years event was moved to a new and bigger venue, the the Horwood House conference centre located between Buckingham and Milton Keynes.

Four of us from Cork made the trip, flying Cork to Stansted and hiring a car for the trip to Horwood house. This was a very successful arrangement with the car only costing just over £50 each.

Bletchley Park

We travelled early Friday morning and paid a visit to the famous Bletchley Park which is located not too far from the conference centre.

During World War II, code breakers at Bletchley Park decrypted and interpreted messages from a large number of Axis code and cipher systems, including the German Enigma machine. The high-level intelligence produced at Bletchley Park provided crucial assistance to the Allied war effort.

Bletchley Park is now a museum run by the Bletchley Park Trust and is open to the public. It is also the location for the proposed national amateur radio centre being set up by the RSGB, due to open next spring. We were able to see the RSGB building which appeared ready for occupation and we look forward to a visit maybe around next years convention.

We really did not have enough time to fully explore all to be seen at Bletchley



The DX Dinner at the RSGB 2010 Convention
Jeremy EI5GM, Dave EI9FBB, Dave EI4BZ, Jerry EI6BT

Park and at least a full day visit with no distractions would be required to do it justice.

We checked in to Horwood House in plenty of time to catch the Friday night Martin Lynch Anniversary Dinner and socialising continued late into the night.

Martin was celebrating 20 years of Martin Lynch & Sons serving radio amateurs retail needs.

He was a major sponsor of the HF Convention and mounted a comprehensive trade stand over the two days.

The programme on Saturday and Sunday has four lecture streams running simultaneously.

On Saturday these were IOTA.DX, Tech-



Martin Lynch

nical, VHF & Up and Contest University. Each presentation ran for 45 minutes, with three before lunch and four after.

Among the subjects covered on Saturday were various DXpedition reports, planning applications, linear amplifier design, ferrite chokes, HF antennas, military communications, NVIS, amateur satellites, 70cm & 23cm dxing, the Earth's magnetic field and its influence on radio propagation, coronal mass ejections, beacons & band plans and in the contest university steam we had contest preparation, homebrew antennas, WRTC report and a look at some other contests.

There was plenty to do and it was difficult to decide on what to attend. Lectures generally ran to time and unlike previous venues, there was ample space in all the lecture rooms.

There was a semi-formal dinner on Saturday night, very well attended followed by another late session of socialising. Its great not to have to travel to go to bed!

Sunday's format was the same as Saturdays with 50 lectures available before the wind-up in mid-afternoon with the big raffle.

EI5DI and EI4BZ both won minor prizes.

The only slight problem was encountered by those of us who are accustomed to traditional food. The fare on offer represented the multi-cultural society on the neighbouring island and was definitely not suited to 'normal' food lovers.

Another slight issue was that bar staff we meet on trips to UK events are somewhat less efficient than what we are used to here.

It is certainly an event well worth attending, especially if you have any interest in contesting or DXing.

EI's attending included EI5GM, EI9FBB, EI6BT, EI7FJ, EI5DI and EI4BZ.



Jerry EI6BT and Jeremy EI5GM at Bletchley Park



Contest Corner

by IRTS Contest Manager Thos Caffrey EI2JD

IRTS VHF/UHF Field Day 2010

		QSOs	Points
Open Section			
	EI9E/P, Network Southern Area R. E. Club	806	449,624
Restricted Section			
50MHz	EI7TRG/P Tipperary Amateur Radio Group	20	19,203
70MHz	No Entry		
144MHz	EI7T/P Tipperary Amateur Radio Group	53	21,685
432MHz	No Entry		
1296MHz	EI7DAR/P Dundalk Amateur Radio Society	1	176

IRTS HF SSB Field Day 2010 Results

		QSOs	Mults	Points
Open Section				
1	EI7T/P, Tipperary Amateur Radio Group EI7IG, EI2IT, EI8JA, EI3ENB	383	74	101,232
2	EI2KA/P, Tim McKnight	96	23	7,268
Restricted Section				
1	EI3Z/P, Shannon Basin Radio Club EI4CF, EI8IU, EI3HA, EI6GGB, EI9HX, EI5GUB	876	120	419,499
2	EI3HB/P, Kinsale Radio Club EI5GM, EI9FBB	746	90	223,110
3	EI4ALE/P, Galway VHF Group EI1EM, EI3IS, EI5DD, EI8DRB	547	76	173,432
4	EI4GRC/P, Galway Radio Club, EI2II, EI7DMB, EI2HG, EI8DD, EI6JU	467	74	127,206

IRTS Contests 2011

January 3rd	1400-1700	IRTS 80n Counties Contest
April 25th	1300-1500	IRTS Spring 2m Counties Contest
June 5-6th	1500-1500	IRTS CW Field Day
June 19th	1400-1700	IRTS 80n Counties Contest
July 3-4th	1400-1400	IRTS VHF/UHF Field Day
August 28th	1300-1500	IRTS Autumn 2m Counties Contest
September 4-5th	1300-1300	IRTS SSB Field Day
	All time UTC	

IRTS

Winter 80m

Counties Contest 2011

*The date of the next IRTS
80m counties contest is the
3rd January 2011.*

It has been decided to hold the contest on the Bank Holiday Monday so as not to intrude on your weekend festivities. With this in mind it is hoped to see ALL counties activated for the contest. The short 3 hour format has seen a yearly increase from testers and non-testers alike. If you are from a county with only a few licensed operators do try and come on air as you will be a very sought after station.

The rules of the contest can be found on the IRTS website.

<http://www.irts.ie>

Can your attention please be drawn to rule 4.4;
The rule has been added to highlight the point that we need to stick to the recognised Band Plan. There may be a lot of other hams using the band not involved in the contest so portions of the band must be kept clear of contesting so they can also enjoy their hobby.

Frequencies:

CW:- 3510-3560;

SSB:- 3600-3650 & 3700-3775

A question often asked is:
"Can you suggest a logging programme for the IRTS 80m Counties Contest?"

The one that is recommended is SD, which has a section especially for this contest.

This can be found at www.ei5di.com

After the contest then use SDCHECK to make the Cabrillo file to send to the contest manager. This is the preferred way to send your log.

The closing date for logs is the 2nd February 2011.

Merry Christmas to all and good contesting in 2011.

Thos EI2JD

Amateur Radio For All Plans

A pair of Pearl Anniversaries is planned in Fermanagh for 17th April 2011. Amid celebrations of its thirty years of service, the Share Centre will host Lough Erne Amateur Radio Club's thirtieth Radio Rally. This annual gathering has been Ireland's major meeting place for northern radio amateurs and southern radio experimenters ever since this Fermanagh club's first Rally in April 1982.

Share Holiday Village today is Ireland's largest residential activity centre with over 15,000 visitors each year. On its lakeside site, at Smiths Strand south west of Lissnaskea, Share accommodates people from all backgrounds and in large numbers. Rooted 30 years deep, Share's core aims are the inclusion of disabled and non-disabled people by providing shared opportunities in a wide range of creative, educational and recreational activities.

Share's provision now includes amateur radio, a hobby rich in creative, educational and recreational opportunities for all. Recent Club-run courses and examinations held in Share produced a record 26 new radio amateurs, each with a Foundation licence from Ofcom, and most are now busy on-air with other amateurs across these islands, Europe and North America.

On 17 April, the Sunday before Easter, several hundred visitors are expected from Northern Ireland and the Republic, and some from Great Britain at the Club's fifth rally held in Share's big Arena. The 2010 rally theme was low power radio with a talk broadcast on the internet that attracted world-wide interest. The 2011 rally theme, blending Club and Share aims, will be Amateur Radio For All, encouraging this culturally important technological pastime.



Some of the year's 26 new Foundation licensees from courses at Share presented with Welcome to Amateur Radio certificates at the 2010 rally by Billy Pollock (right) himself 50 years licensed, call sign GI3NVW.

More Information:

Michael Clarke M5MTC, Chairman Lough Erne Amateur Radio Club, Northern Ireland Club of the Year, Tel 028-6862-1436, mi5mtc@learc.eu .



Foyle & District ARC

The Members and Committee of the Foyle And District Amateur Radio Club would just like to take to thank all those who attended the FADARC rally on November 7th.

Your continued support is greatly appreciated.

We would also like to thank the traders for their attendance and their thanks to...

Peter; P&D Amateur Radio who sponsored the 70cm Vertical,
Chris; 2IONIE Wire antennas who sponsored both the 40 and 20m dipoles,
Billy; Tyrone Amateur Electronics who sponsored the Icom shirt,
and to Peter Lowrie for sponsoring the Call Book as the Door Prize.

Thank you to all. Hope to see you all at next years rally.

Nigel Gamble GI7FJY, Club Chairperson

Hill Walking Radio Network

A group of people have come together to combine both interests of hill walking and hobby radio to establish Hill Walking Radio Network.

The group encourages people who take part in hill walking or other outdoor activities to carry walkie talkies as a safety extra

While out trekking your mobile may not always work. There are two reasons for this:

- (a) poor coverage,
- (b) when high up on the hills the mobile gets confused, because of the cross configuration from all the masts. You can experience the 'echo effect'. This is all the more reason why you or your group should carry a walkie talkie as a back-up.

The radios are known as PMR446 walkie talkies. (this is because of the frequency they use 446MHz).

The sets are licence free, cheap and easy to use and can be purchased at Maplin, Argus or at any good electronic stores.

Even though they are low powered and short range, distances of up to 15km can be achieved from high up on the hills. Weather conditions can change rapidly on the mountain, you may get separated from your group or into difficulty.

You can use your walkie talkie to contact your group or a volunteer base station. Already some members of the rescue services carry these radios as a back up to their own equipment. Other radio operators like AREN and Amateur radio operators too can keep a watch.

Many groups already use these walkie talkies when hill walking. The problem is different groups use different channels. Now using a fixed channel will make hill walking that bit safer. This works well in parts of Scotland Sweden and Austria. The first phase is to encourage people in the Munster area to come on board.

Hopefully in twelve months from now we will be nationwide. On the other hand if you don't feel up to the strenuous activity of hill walking you can join as a volunteer and keep a safety watch on ch8.

Email us at
hillwalkingradioch8@gmail.com

So let's keep an ear out for each other and tune to channel 8, the National Hill Walking channel.

Radio Fun; Or, How does Santa do it?

Peter Mac Dougall MCIJ, EI-299 – G7VEW

“Tell me more, Grand-dad! *At last we’re getting somewhere, this should be good!”*

But he has some special scientific aids to call upon. He is able to travel faster than the speed of light!

“How fast is that, Grand-dad? *I think I’ve got him there!”*

Well, it’s almost 700 miles-per-hour, according to astronomers and physicists, but I did say faster than that; even faster than radio waves! Remember when you saw me hammer-in that antenna post at the other end of the field – and heard the sound of the hammer almost a second later? Well, Santa Claus can ride around the world even faster than that; and just like radio waves, hardly anything gets in his way.

He has plenty of extra time and doesn’t have to bother about crossing borders or going up and down chimneys; you could say he gets around places where even radio signals cannot reach.

He doesn’t have to live as we do; he can get up and go to bed at anytime he wants and do all his work in-between in the blink of an eye. That’s why you’ll never actually see him on the night of Christmas Eve. He is travelling so quickly. When I was little he even had time to set up my first train set and put batteries in my first radio the right way up - before moving on to the next house. No wonder that he needs to take a rest in a department store for a few weeks before the big night. That’s the only time you’ll see him in ‘real time’; but *I believe* he is actually travelling faster than we might have thought – because he can be seen in more than one shop.

“But what about that TV advert where the little girl gives Santa a sip of her cola?

I’ve got him now! How will he wriggle out of that one?”

Oh, come on kid; surely you don’t believe in TV advertising – at your age!

73 to children, everywhere - and Happy Holidays to you all!

Footnote from ‘Peter Madison’, a former BBC employee;

“Denying the existence of Santa Claus on-air is an instant dismissal offence!” And if you want to get really serious about all this, just look up the works of James Maxwell, Heinrich Hertz and Albert Einstein. They believed!

“That’s a good question!” As interviewees often reply when asked an awkward one - and hesitate, because they don’t know the answer. Then they prevaricate or go into a prepared speech; a response to a question they’d hoped would be asked instead.

Now, I’m not a politician or a scientist but I do like the magic of this time of year, especially since I am still a big kid at heart. *I believe* that all children have special gifts, and I don’t mean the Christmas and birthday varieties; boys and girls are born with what the Scots call ‘Fey’, a kind of magic second-sight – which they gradually lose before they are about ten years old. Objects, shapes, sounds and even friendly but ‘ghostly’ beings can be sensed. You all must have seen a baby suddenly glance up, attracted to something you cannot see, and smile or giggle with delight. No need to worry, there is no harm there. (Dogs and cats can do that all their lives, which is a bit worrying. *Memo to self: Buy Rover and Tiddles a present.*)

The trouble is that as we grow older we gradually lose this wonderful gift as we learn to cope in the ordinary day-to-day modern world.

The Irish have a phrase, ‘Tir Na n’Oge’, which *very* roughly translated means, ‘The land where we never grow old.’

Unfortunately it is both physically and mentally impossible when we become exposed to 21st century life and its “More-Downs-Than-Ups”, - in a word – responsibilities. As youngsters we believe in quite a few impossible things and it may take years for us to find out that they are not feasible.

For example: I do not believe in Jack Frost, The Bogeyman or The Easter Bunny. They are probably just man-created cartoon characters. (Jack doesn’t make those frosty mornings patterns – it’s just moisture and cold weather, right? Doh!)

I have had some pleasant encounters with The Tooth Fairy after the pain of losing a childhood tooth. If only I had all those sixpences now. My uncle once went to sleep with his head *under* the pillow and the fairy came and took all his teeth out. Well, at least that’s what he told me when I saw them in a glass of water at his bedside one morning, long ago.

Children wonder how Father Christmas performs that once-a-year magic trick but as they have to go to bed a bit earlier than normal on Christmas Eve and they try to stay awake to see him, the harder they try - the sleepier they get - and they invariably miss his actual visit, seeing only the happy results and being well-chuffed with that.

“So how does he do it, grand-dad?

Although I don’t really care, as long as he does it!”

Well, the first thing to learn is what we grown-ups call the 24 hour clock.

You’ll know that One-o-clock to Twelve-o-clock is pretty straightforward but, instead of going back to One-o-clock again, (round about lunchtime) we carry on the numbers; 13 hours, 14 hours, 15 hours etc and pretty soon we know that 20 hours is Eight-o-clock at night – and if it’s Christmas Eve, we should be in bed!

The next thing we learn is that there are time differences for different countries of the world. Midnight in Australia arrives twelve hours before ‘lunchtime’ where we are; in fact it’s the day before: and further to the west of us, people are having their afternoon tea, and it could be yesterday!

“Ah, come on Grand-dad, that’s just not possible is it? *The auld duffer has been at that big bottle of Black Bush that Mummy hides from him, again!”*

Its true; as the Earth goes round the Sun it will be a dark night for some countries and bright sunshine for others. All that we have done is create a place where we call GMT as a starting zero-point and add an hour as time goes eastwards from there.

We subtract an hour if we travel westwards.

Nowadays it’s known as Universal Co-ordinated Time or UTC for short and, in real time it works fine for the entire world’s zones. We all get up at our dawn and go to bed sometime round our dusk. (Or later, as we get older and enjoy our Christmas tot!)

This is partly why Santa can cover so much of the planet in just one night!

EI's on EQSL (as at December 4th 2010)

Updates and enquiries to Thos EI2JD at thoscaffrey@hotmail.com

DXCC Confirmed		Worked All Zones
219 EI7BA (+1)	54 EI7IQ	40 EI0CZ
174 EI3IO	52 EI8BLB (New)	40 EI4CF
173 EI9FBB (+5)	50 EI6AK	40 EI7BA
171 EI4CF	50 EI6GGB	40 EI9FBB
165 EI2JD (+1)	49 EI1429 (+3)	40 EJ9FBB
164 EI7CC	49 EI2FSB	39 EI2JD
158 EI0CZ (+2)	47 EI8JW	39 EI3IO
150 EJ9FBB	46 EI/DK2AT	39 EI9HX
148 EI9HX	43 EI7IS	39 EI9JU
147 EI6IZ	42 EI4DIB (+1)	39 EI9O
136 EI9O (+10)	42 EI5IX	38 EI8GS
130 EI9JU	41 EI3EBB	37 EI7JZ
125 EI8GS	41 EI4IR	34 EI1DG
121 EI9FVB	39 EI0CPL	34 EI3GYB
118 EI1DG (+1)	39 EI6IF	34 EI5IF
117 EI6HB	37 EI3GAB (+15)	33 EI5GM (+2)
116 EI7JN	37 EI7GM	33 EI7CC
115 EI3GYB	37 EI9GSB (New)	32 EI4BZ
110 EI6AL	34 EI1KARG	32 EI4GNB
109 EI5IF	33 EI157I	32 EI6AL
107 EI8FH	32 EI90GPO	32 EI9FVB
104 EI4GXB	30 EI7CHB	31 EI6JK
104 EI8IU	30 EI5HV (+3)	31 EI8FH
103 EI5GM (+22)	28 EI4IN	30 EI0W (+1)
102 EI6JK	28 EI5GB	30 EI4GXB
102 EI9HQ	27 EI3GDB	28 EI4GMB
101 EI4BZ	26 EI7IW	26 EI2KC (+6)
100 EI0W (+2)	25 EI2FS	25 EI2GLB
100 EI7DAR (+8)	24 EI/G4DDL	22 EI7JN
98 EI7JK	24 EI3FFB	15 EI8JB
92 EI3HA (+4)	24 EI8GNB	13 EI4DIB (+3)
91 EJ3HA (+12)	22 EI1NC	10 EI1429
92 EJ9HQ	20 EI2IV	10 EI4IN
88 EI4GNB	20 EI9KC	8 EI7IW
86 EI2KC (+7)	18 EI4HX	
86 EI4HH (+7)		
86 EI9ES	Worked All States	Worked Prefixes
82 EI2GLB	50 EI4CF	1,321 EI4CF (+66)
80 EI5GJB	50 EI8GS	1,111 EI2JD (+6)
80 EI7IX (+1)	50 EI9FBB	981 EI9FBB (+60)
78 EI8IQ (+2)	50 EJ9FBB	978 EI7CC (+25)
77 EI5GUB	50 EI9HX	959 EI6JK (+142)
76 EI8JR	50 EI9JU	954 EI8GS (+22)
73 EI2II	50 EI9O	932 EI0W (+120)
73 EI8DL	49 EI9HQ	932 EI7DAR (+66)
72 EI4HQ	49 EI9HQ	878 EI9JU (+169)
72 EI7JZ (+6)	48 EI6HB	854 EI9HQ (+8)
71 EI3IS	47 EI2JD	827 EI3IO (+9)
71 EI8HL (New)	47 EI3IO	821 EI0CZ
71 EI9CF	47 EI7JN	734 EI4GXB (+39)
69 EI8GP	45 EI0CZ	727 EI7BA (+6)
68 EI/DH0GSU/p	45 EI4BZ	620 EI4BZ (+17)
67 EI7BFB (+3)	45 EI5GM	617 EI9FVB (+18)
66 EI7IM	45 EI7BA	608 EI7JK (+38)
66 EI8JB (+10)	45 EI8GP	513 EI5IF (+24)
65 EI7M	43 EI0W	507 EI5GM (+36)
65 EI8DD	43 EI7DAR	491 EI1DG (+64)
64 EI9FV	41 EI4GNB	489 EI4GNB (+16)
62 EI5GSB	41 EI5IF	471 EI9O (+31)
62 EI3JB (+28)	40 EI4GXB	455 EI8FH (+11)
61 EI4IS	40 EI7CC	403 EI9JM (+6)
61 EI9JM	40 EI9HW	402 EI2KC (+63)
59 EI9EW (+7)	36 EI2KC (+3)	385 EI8IU (+24)
58 EI6IL	32 EI6JK	383 EI8JB (+41)
58 EI9JF	31 EI4GMB	378 EI8GP (+3)
57 EI5EV (+4)	30 EI9ES	327 EI3HA (+39)
57 EI7GSB (+3)	29 EI9FVB	297 EI7GSB (New)
57 EI8JK	26 EI6AL	237 EI2GLB
56 EI6ARB	26 EI9JM	213 EI7JN
56 EI7BMB	15 EI8JB	200 EI4GMB
55 EI5HE	13 EI2GLB	110 EI4DIB (+17)
55 EI6CPB	8 EI4DIB (+1)	75 EI1429

EI DXCC Listings (08/12/10)

DXCC Challenge	301 EI7BA	149 EI6FR
2,226 EI7BA	300 EI8AU	143 EI6IZ
1,933 EI9FBB	286 EI3GV	130 EI4BZ (+1)
1,811 EI3IO (+112)	284 EI9FBB	117 EI7GL
1,582 EI7CC	264 EI4GK	30m
1,384 EI6FR	249 EI8GS	256 EI7BA
1,144 EI2JD	242 EI2JD	218 EI3IO (+3)
1,086 EI6IZ	226 EI9FVB	201 EI9FBB
1,026 EI9JF	225 EI9JF	167 EI9JF
	213 EI7GL	152 EI6IZ
	200 EI6IL	145 EI6FR
DXCC Honor Roll	188 EI2CH	110 EI4BZ
Mixed	186 EI7II	20m
338 EI6FR/341	177 EI9FE	303 EI7BA
335 EI2GS/340	169 EI4BZ (+2)	287 EI6FR
335 EI6S/351	162 EI4HH	280 EI9FBB
335 EI7CC/347	153 EI8IU (+1)	247 EI3IO (+4)
332 EI7BA/334	148 EI9E (New)	217 EI9JF
331 EI8H/356	129 EI9HQ	193 EI2JD
	114 EI4EX	177 EI8GS
Phone	108 EI6HB	172 EI4BZ (+2)
334 EI6S/348	105 EI1CS	165 EI6IZ
333 EI2GS/338	105 EI9HX	161 EI9FVB (+22)
333 EI7CC/345	101 EI3IP	115 EI3GV
329 EI8EM/334		108 EI9E (New)
	CW	105 EI9HQ
Mixed	318 EI7BA	17m
356 EI8H	316 EI7CC	290 EI7BA
351 EI6S	274 EI6FR	249 EI9FBB
347 EI7CC	267 EI9FBB	164 EI6FR
341 EI6FR	253 EI9JF	146 EI9JF
340 EI2GS	230 EI6IZ	123 EI6IZ
334 EI7BA	230 EI4BZ (+1)	121 EI3IO (+14)
323 EI3IO (+2)	208 EI2JD	103 EI2JD
306 EI2HY	163 EI8IU (+3)	15m
301 EI9FBB	155 EI1DG	258 EI7BA
287 EI9JF	122 EI5GM	229 EI9FBB
270 EI9O (+17)	119 EI7GY	221 EI6FR
269 EI2CR	109 EI2IH	193 EI3IO (+5)
262 EI2GX	109 EI4HM	173 EI4BZ (+2)
262 EI2JD	107 EI/GM4ARJ	165 EI8GS
255 EI5GM	100 EI6AL	148 EI2JD
249 EI8GS	RTTY/Digital	124 EI9FVB
246 EI6IZ	153 EI1DG	119 EI6IZ
242 EI4BZ (+2)	137 EI7BA (+10)	111 EI9E (New)
226 EI9FVB	126 EI6FR	109 EI3GV
211 EI8IU	102 EI6HB	105 EI9JF
210 EI6IL		12m
194 EI1DG	Satellite - No Entry	190 EI7BA
170 EI4HH	160m	172 EI9FBB
152 EI6HB	207 EI3IO (+12)	10m
148 EI9E (New)	189 EI7BA	253 EI3IO (+3)
140 EI4GXB	118 EI9FBB (+5)	204 EI7BA
134 EI9HQ	110 EI6IZ	158 EI4BZ (+2)
133 EI7GY		157 EI9FBB
129 EI5GUB	80m	154 EI6FR
128 EI8HA	304 EI6S	144 EI7GL
117 EI3HA	232 EI7BA	144 EI8GS
111 EI5IF	206 EI9FBB	134 EI2JD
103 EI6AL	137 EI3IO (+11)	128 EI4GK
102 EI2GLB	124 EI2JD	102 EI9E (New)
101 EI7JQ	113 EI4BZ (+3)	
100 EI4HQ	108 EI6FR	
	104 EI6IZ	
Phone	40m	
348 EI6S	267 EI7BA (+4)	
345 EI7CC	219 EI9FBB (+5)	
338 EI2GS	177 EI9JF	
334 EI8EM	176 EI3IO (+9)	
331 EI8AR	152 EI2JD	
318 EI6FR		

DXCC Band Status (08/12/10)											
		160m	80m	40m	30m	20m	17m	15m	12m	10m	6m
10	EI9FBB										
9	EI3IO										
9	EI7BA										
7	EI6FR										
7	EI6IZ										
6	EI2JD										
6	EI4BZ										
5	EI9JF										
3	EI7GL										
3	EI8GS										
3	EI9E										
2	EI3GV										
2	EI9FVB										
1	EI3EBB										
1	EI4GK										
1	EI6S										
1	EI9HQ										

Members Advertisements

Silent Key Sale

FT75 – needs attention

FT290R with Mobile Mount - Bracket, needs attention

MFJ Cub QRP txvr 20m

Kenpro KT200-EE

GRE PSR-282 Scanner-200ch

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3 x toolboxes of misc. junk items

Offers, more info contact:

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Radio News Deadline

Noon on Thursdays

Input to charlie.carolan@gmail.com

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or by phone to: 087-6265418

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Annual Radio Rally

Sunday 20th February 2011

Coolmine Community School,

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Doors open for traders at 0900

Doors open to public at 1100

Admission €5.00

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To book tables or for information

Contact:

Tony at 0872439997 or Tom at 01-8211043



Bangor and District ARS Radio and Computer Rally

Saturday 2nd July 2011
at 11:30 AM

Donaghadee Community Centre
Donaghadee, County Down BT21

Contact Bill GI4AAM for further details:

Tel: 028 9181 6707

Email: bill.langtry@btinternet.com

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Refreshments will be available throughout the day.
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Admission Fee: Only £3:00

Information from:
Jim Henry, G10DVU
Telephone 048 9266 2270
See gi0dvu.co.uk/lisburnrally.aspx
or
MI0BPB, G14LKG both QTHR.

Lough Erne Amateur Radio Club

Annual Rally

**The Share Holiday Village,
Lisnaskea,
County Fermanagh
BT92 0EQ**

Sunday 17th April 2011

Bring & Buy, Caravan Park.
Access from Lough Erne/Shannon Waterway
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Doors open 1130

Further details from Iain:
Telephone: 028 66326693

iain@learc.eu

<http://www.lougherneradioclub.co.uk/>



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2011

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Sat/Sun. 26th/27th March 2011

**Radisson Blu Hotel,
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Rally Sunday morning
AGM Sunday afternoon**

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**More information from:
Ger McNamara EI4GXB**



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Daiwa CN-801. New. 2kw SWR/Power Meter.	
Auto calibrate 1.8-200 MHz	€149.00
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Icom IC-706 MK2G. HF + 6m + 2m + 70cms. Mobile. As new	€699.00
Icom IC-821H 2m/70cm 45/35w base multi-mode,	€599.00
Icom IC-7000. HF + 6m + 2m + 70cms. Mobile. As new	€899.00
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